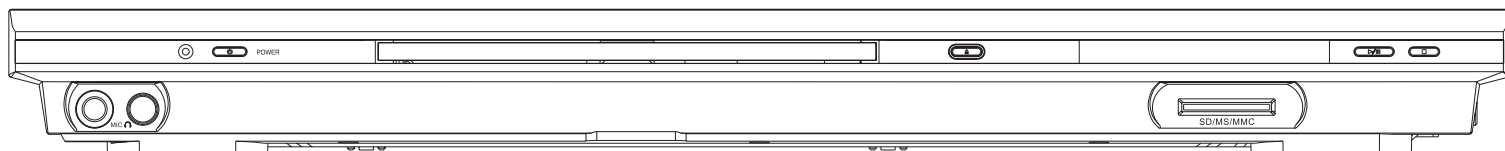


SERVICE MANUAL

DV968S



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1. SAFETY PREAUTIONS

1.1 GENERAL GUIDELINES

1. When servicing, observe the original lead dress. if a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barrier, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2.PREVENTION OF ELECTRO STATIC DISCHARGE(ESD)TO ELECTROSTATICALLY SENSITIVE(ES)DEVICES

Some semiconductor(solid state)devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive(ES)Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge(ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially availabel discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices,place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as anti-static (ESD protected)can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, alminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

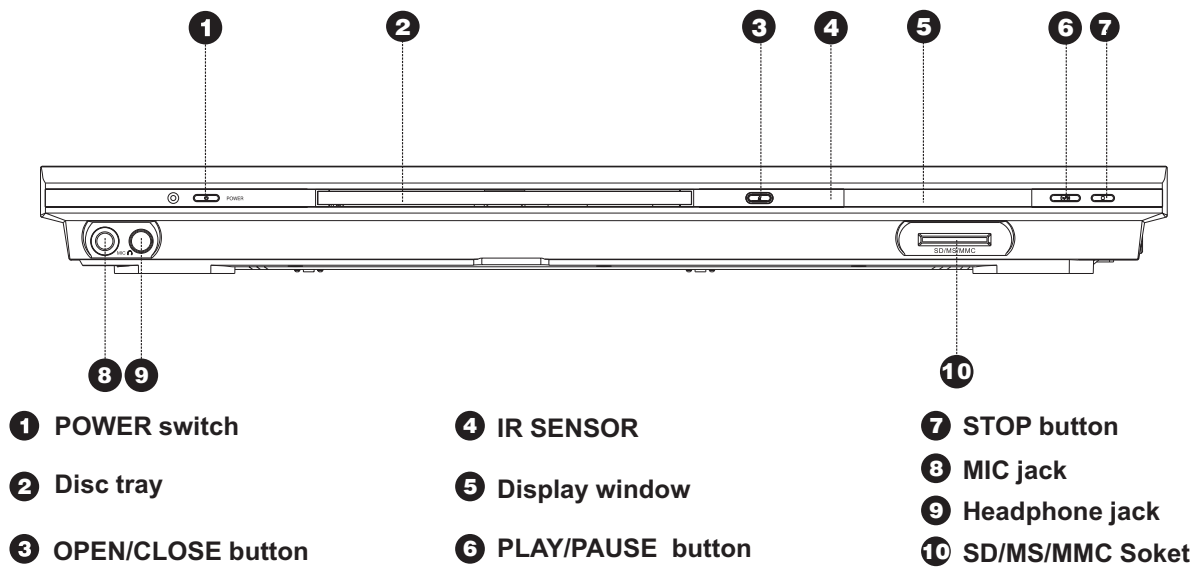
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity(ESD).

notice (1885x323x2 tiff)

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety. These parts are marked by $\triangle$ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

■ Front Panel Illustration



4.PREVENTION OF STATIC ELECTRICITY DISCHARGE

The laser diode in the traverse unit (optical pickup) may brake down due to static electricity of clothes or human body. Use due caution to electrostatic breakdown when servicing and handling the laser diode.

4.1.Grounding for electrostatic breakdown prevention

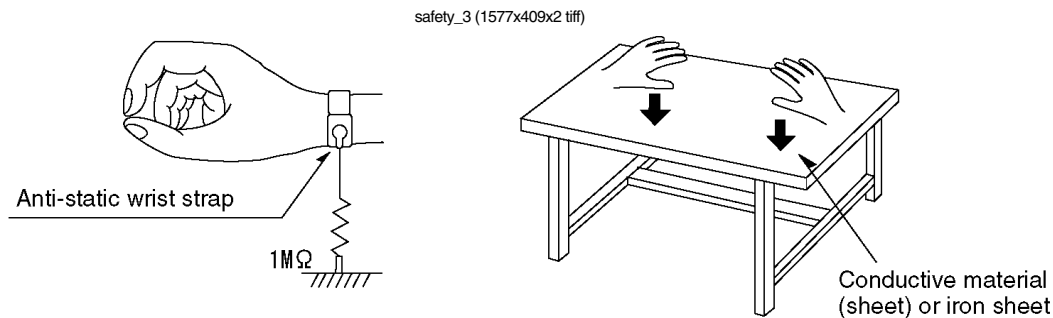
Some devices such as the DVD player use the optical pickup(laser diode)and the optical pickup will be damaged by static electricity in the working environment.Proceed servicing works under the working environment where grounding works is completed.

4.1.1. Worktable grounding

1. Put a conductive material(sheet)or iron sheet on the area where the optical pickup is placed,and ground the sheet.

4.1.2.Human body grounding

- 1 Use the anti-static wrist strap to discharge the static electricity from your body.



4.1.3.Handling of optical pickup

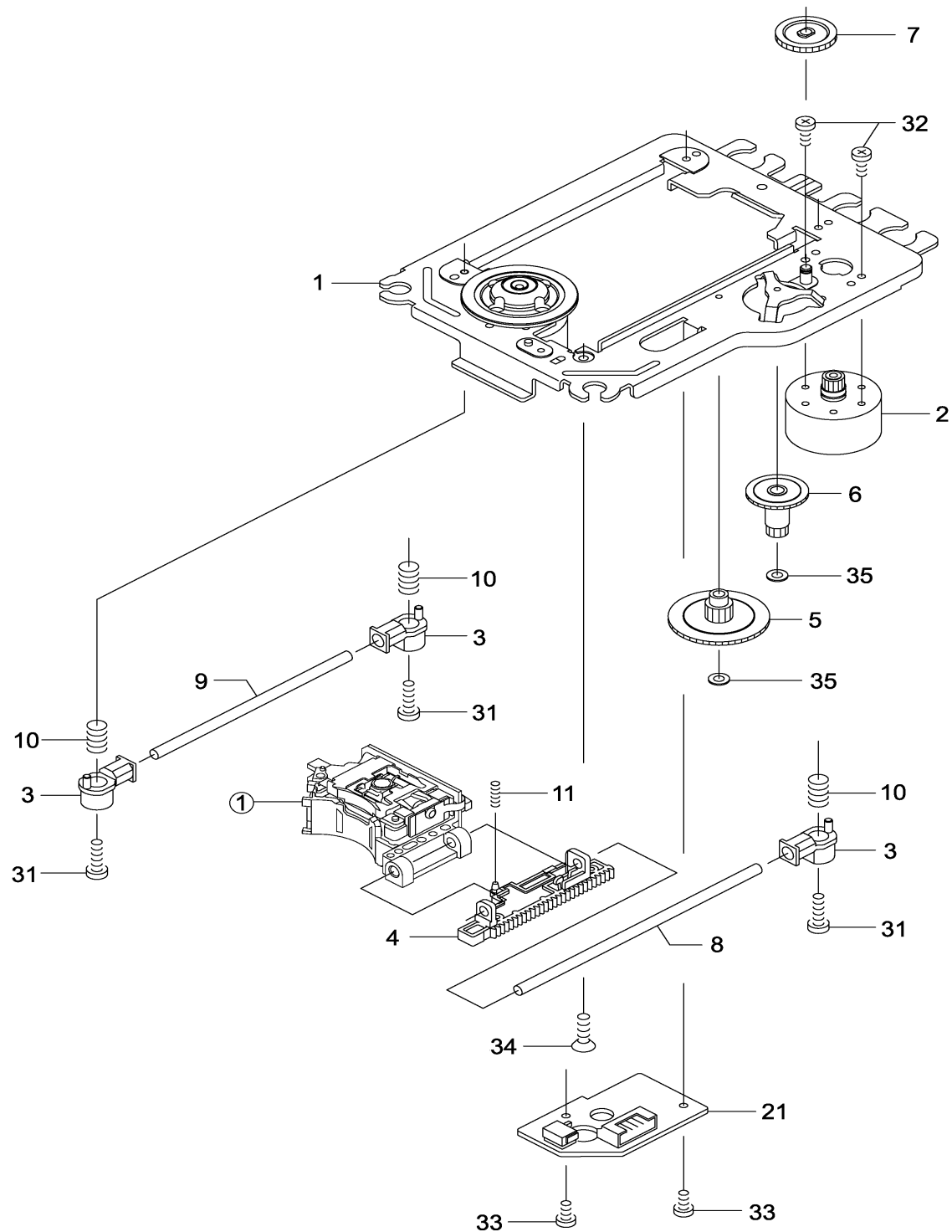
1. To keep the good quality of the optical pickup maintenance parts during transportation and before installation, the both ends of the laser diode are short-circuited.After replacing the parts with new ones, remove the short circuit according to the correct procedure. (See this Technical Guide).
2. Do not use a tester to check the laser diode for the optical pickup .Failure to do so willdamage the laser diode due to the power supply in the tester.

4.2. Handling precautions for Traverse Unit (Optical Pickup)

1. Do not give a considerable shock to the traverse unit(optical pickup)as it has an extremely high-precise structure.
2. When replacing the optical pickup, install the flexible cable and cut is short land with a nipper. See the optical pickup replacement procedure in this Technical Guide. Before replacing the traverse unit, remove the short pin for preventingstatic electricity and install a new unit.Connect the connector as short times as possible.
3. The flexible cable may be cut off if an excessive force is applied to it.Use caution when handling the cable
4. The half-fixed resistor for laser power adjustment cannot be adjusted. Do not turn the resistor.

5. Assembling and disassembling the mechanism unit

5.1 Optical pickup Unit Exploded View and Part List



Pic (1)

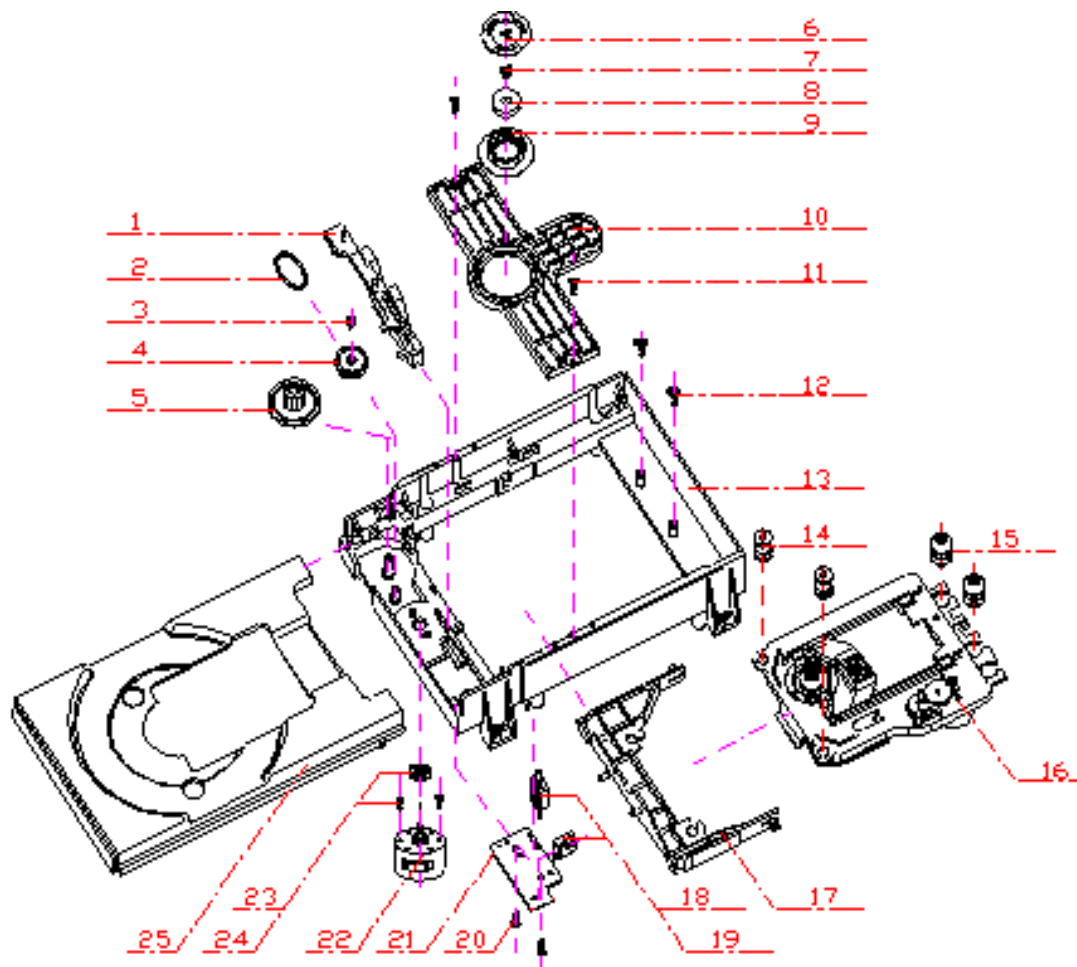
Materials to Pic (1)

No.	PARTS CODE	PARTS NAME	Q' ty
①	14692200	SF-HD60	1
1	1EA0311A06300	ASSY, CHASSIS, COMPLETE	1
2	1EA0M10A15500	ASSY, MOTOR, SLED	1
Or	1EA0M10A15501	ASSY, MOTOR, SLED	1
3	1EA2451A24700	HOLDER, SHAFT	3
4	1EA2511A29100	GEAR, RACK	1
5	1EA2511A29200	GEAR, DRIVE	1
6	1EA2511A29300	GEAR, MIDDLE, A	1
7	1EA2511A29400	GEAR, MIDDLE, B	1
8	1EA2744A03000	SHAFT, SLIDE	1
9	1EA2744A03100	SHAFT, SLIDE, SUB	1
10	1EA2812A15300	SPRING, COMP, TYOUSEI	3
11	1EA2812A15400	SPRING, COMP, RACK	1
21	1EA0B10B20100	ASSY, PWB	1
Or	1EA0B10B20200	ASSY, PWB	1
31	SEXEA25700---	SPECIAL SCREW BIN+-M2X11	3
32	SEXEA25900---	SPECIAL SCREW M1.7X2.2	2
33	SFBPN204R0SE-	SCR S-TPG PAN 2X4	2
34	SFSFN266R0SE-	SCR S-TPG FLT 2.6X6	1
35	SWXEA15400---	SPECIAL WASHER 1.8X4 X0.25	2

[illegible]

Note : This parts list is not for service parts supply.

5.2 Bracket Exploded View and Part List



Pic (2)

Materials to Pic(2)

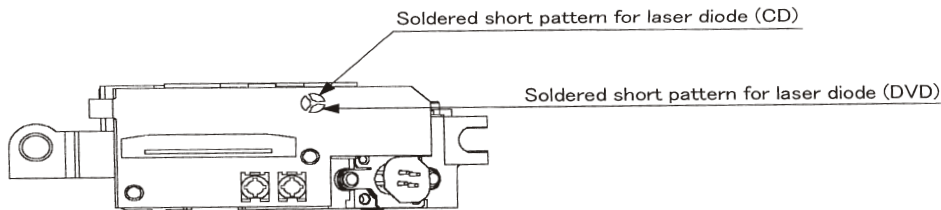
- | | |
|-----------------------------------|--------------------------|
| 1.bracket | 14. front silicon rubber |
| 2.belt | 15. Back silicon rubber |
| 3.screw | 16. Pick-up |
| 4.belt wheel | 17. Pick-up |
| 5.gearwheel | 18. switch |
| 6.iron chip | 19. Five-pin flat plug |
| 7. Immobility mechanism equipment | 20. screw |
| 8. Magnet | 21. PCB |
| 9. Platen | 22. motor |
| 10. Bridge bracket | 23. Motor wheel |
| 11. screw | 24. screw |
| 12. screw | 25.tray |
| 13. Big bracket | |

Before going process with disassembly and installation, please carefully both peruse the chart and confirm the materials.

5.3 MISCELLANEOUS

5.3.1 Protection of the LD(Laser diode)

Short the parts of LD circuit pattern by soldering.



5.3.2 Cautions on assembly and adjustment

Make sure that the workbenches, jigs, tips, tips of soldering irons and measuring instruments are grounded, and that personnel wear wrist straps for ground.

Open the LD short lands quickly with a soldering iron after a circuit is connected.

Keep the power source of the pick-up protected from internal and external sources of electrical noise.

Refrain from operation and storage in atmospheres containing corrosive gases (such as H_2S , SO_2 , NO_2 and Cl_2) or toxic gases or in locations containing substances (especially from the organic silicon, cyan, formalin and phenol groups) which emit toxic gases. It is particularly important to ensure that none of the above substances are present inside the unit. Otherwise, the motor may no longer run.

6.Electrical Confirmation

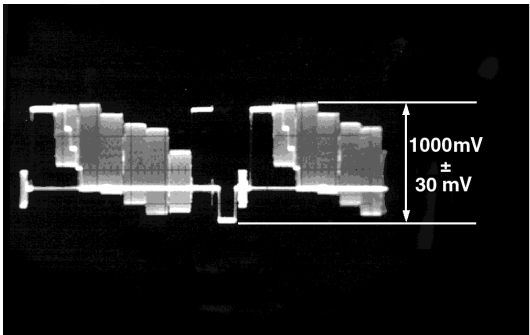
6.1. Video Output (Luminance Signal) Confirmation

DO this confirmation after replacing a P.C.B.

Measurement point	Mode	Disc
Video output terminal	Color bar 75% PLAY(Title 46):DVDT-S15 PLAY(Title 12):DVDT-S01	DVDT-S15 or DVDT-S01
Measuring equipment,tools	Confirmation value	
200mV/dir,10 μ sec/dir	1000mVp-p±30mV	

Purpose:To maintain video signal output compatibility.

- 1.Connect the oscilloscope to the video output terminal and terminate at 75 ohms.
- 2.Confirm that luminance signal(Y+S)level is 1000mVp-p±30mV



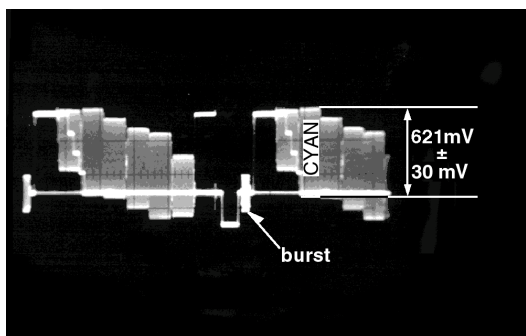
6.2 Video Output(Chrominance Signal) Confirmation

Do the confirmation after replacing P.C.B.

Measurement point	Mode	Disc
Video output terminal	Color bar 75% PLAY(Title 46):DVDT-S15 PLAY(Title 12):DVDT-S01	DVDT-S15 or DVDT-S01
Measuring equipment,tools	Confirmation value	
Screwdriver,Oscilloscope 200mV/dir,10 μ sec/dir	621mVp-p $\pm$ 30mV	

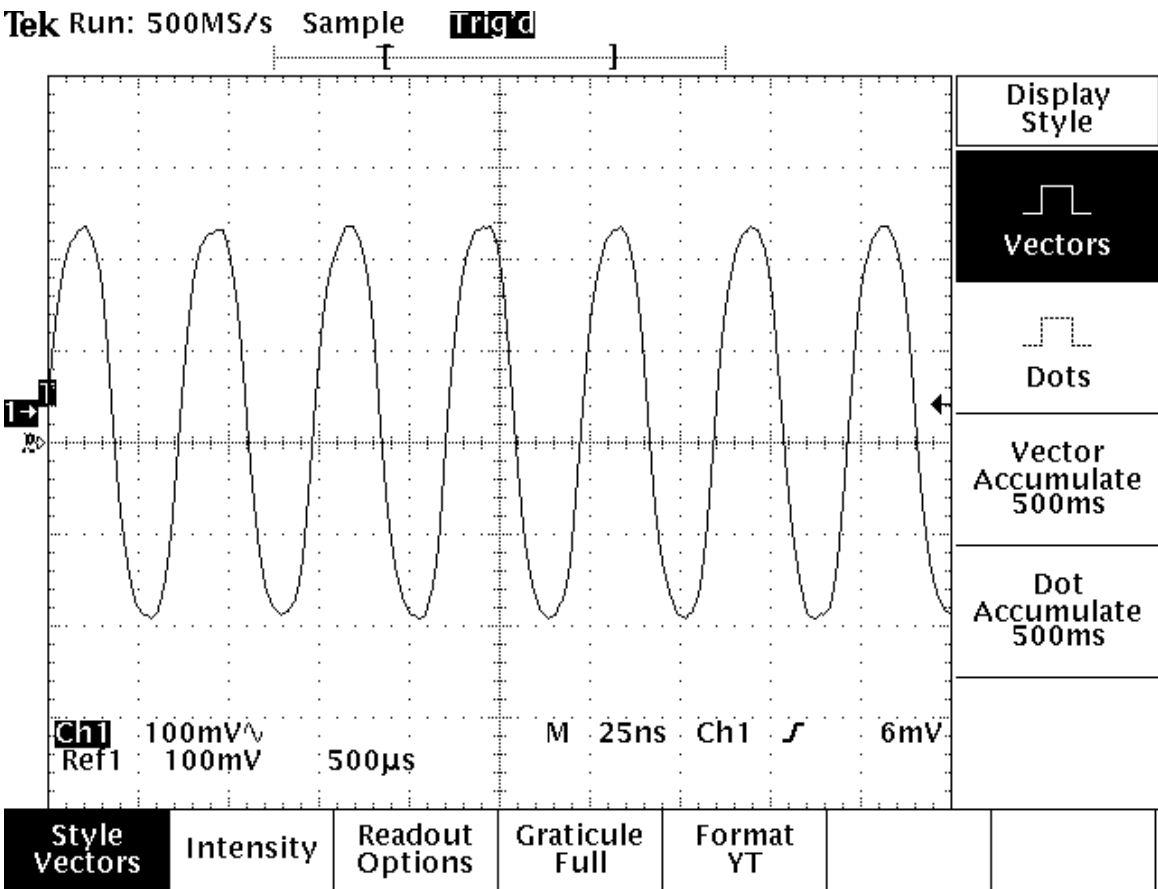
Purpose:To maintain video signal output compatibility.

- 1.Connect the oscilloscope to the video output terminal and terminate at 75 ohme.
- 2.Confirm that the chrominance signal(C)level is 621 mVp-p $\pm$ 30mV

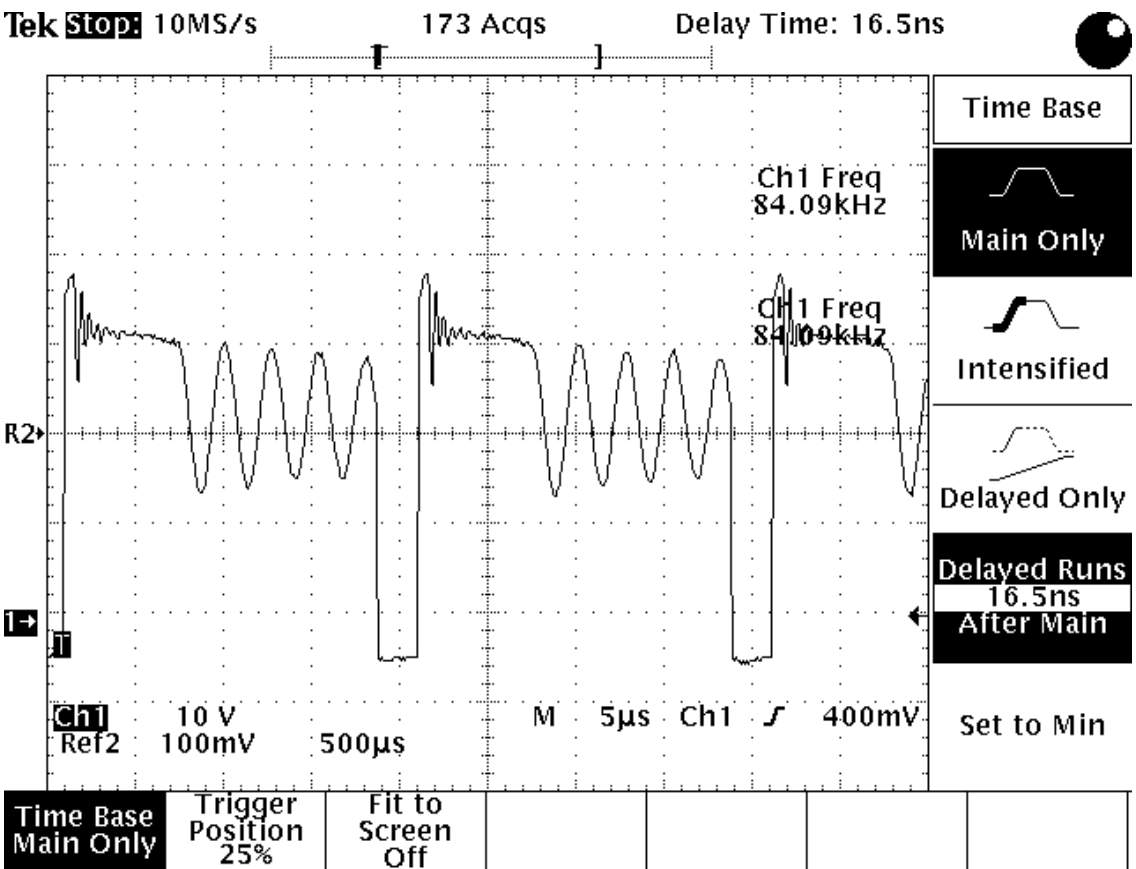


7.MPEG BOARD CHECK WAVEFORM

7.1 27MHz WAVEFORM



7.2 ICVIPER22 PIN.2 WAVEFORM DIAGRAM



8. Am29LV160D

16 Megabit (2 M x 8-Bit/1 M x 16-Bit) CMOS 3.0 Volt-only Boot Sector Flash Memory

DISTINCTIVE CHARACTERISTICS

■ Single power supply operation

- Full voltage range: 2.7 to 3.6 volt read and write operations for battery-powered applications
- Regulated voltage range: 3.0 to 3.6 volt read and write operations and for compatibility with high performance 3.3 volt microprocessors

■ Manufactured on 0.23 μ m process technology

- Fully compatible with 0.32 μ m Am29LV160B device

■ High performance

- Access times as fast as 70 ns

■ Ultra low power consumption (typical values at 5 MHz)

- 200 nA Automatic Sleep mode current
- 200 nA standby mode current
- 9 mA read current
- 20 mA program/erase current

■ Flexible sector architecture

- One 16 Kbyte, two 8 Kbyte, one 32 Kbyte, and thirty-one 64 Kbyte sectors (byte mode)
- One 8 Kword, two 4 Kword, one 16 Kword, and thirty-one 32 Kword sectors (word mode)
- Supports full chip erase
- Sector Protection features:
 - A hardware method of locking a sector to prevent any program or erase operations within that sector
 - Sectors can be locked in-system or via programming equipment
 - Temporary Sector Unprotect feature allows code changes in previously locked sectors

■ Unlock Bypass Program Command

- Reduces overall programming time when issuing multiple program command sequences

■ Top or bottom boot block configurations available

■ Embedded Algorithms

- Embedded Erase algorithm automatically preprograms and erases the entire chip or any combination of designated sectors
- Embedded Program algorithm automatically writes and verifies data at specified addresses

■ Minimum 1,000,000 write cycle guarantee per sector

■ 20-year data retention at 125°C

- Reliable operation for the life of the system

■ Package option

- 48-ball FBGA
- 48-pin TSOP
- 44-pin SO

■ CFI (Common Flash Interface) compliant

- Provides device-specific information to the system, allowing host software to easily reconfigure for different Flash devices

■ Compatibility with JEDEC standards

- Pinout and software compatible with single-power supply Flash
- Superior inadvertent write protection

■ Data# Polling and toggle bits

- Provides a software method of detecting program or erase operation completion

■ Ready/Busy# pin (RY/BY#)

- Provides a hardware method of detecting program or erase cycle completion (not available on 44-pin SO)

■ Erase Suspend/Erase Resume

- Suspends an erase operation to read data from, or program data to, a sector that is not being erased, then resumes the erase operation

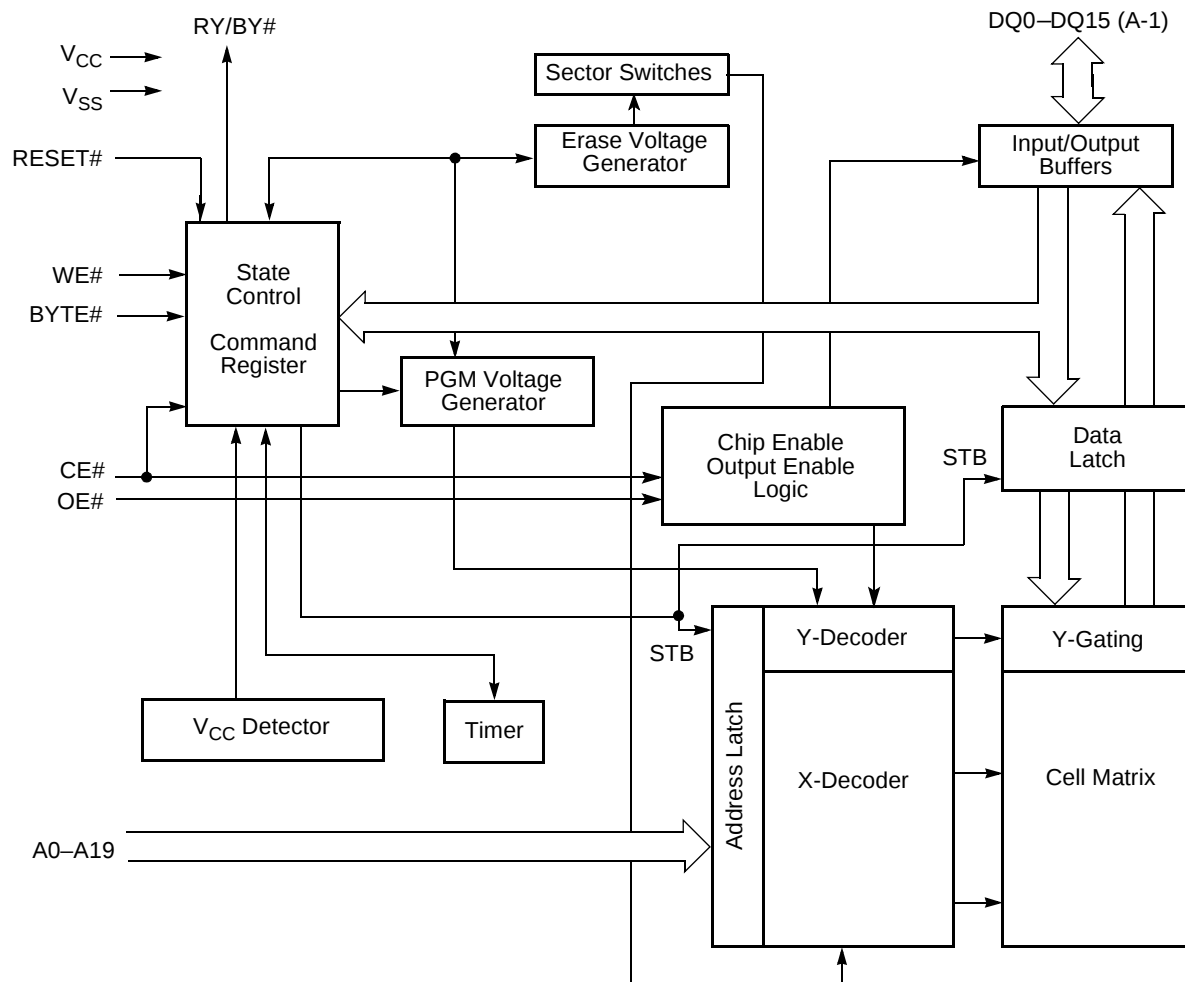
■ Hardware reset pin (RESET#)

- Hardware method to reset the device to reading array data

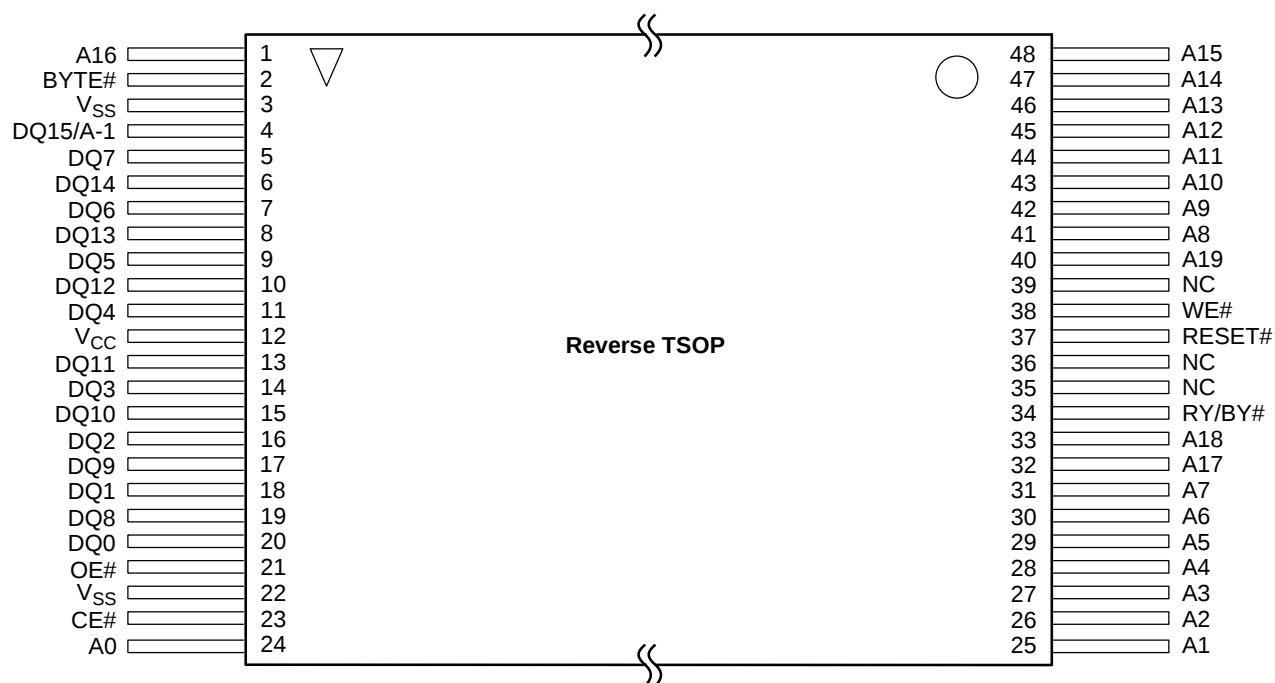
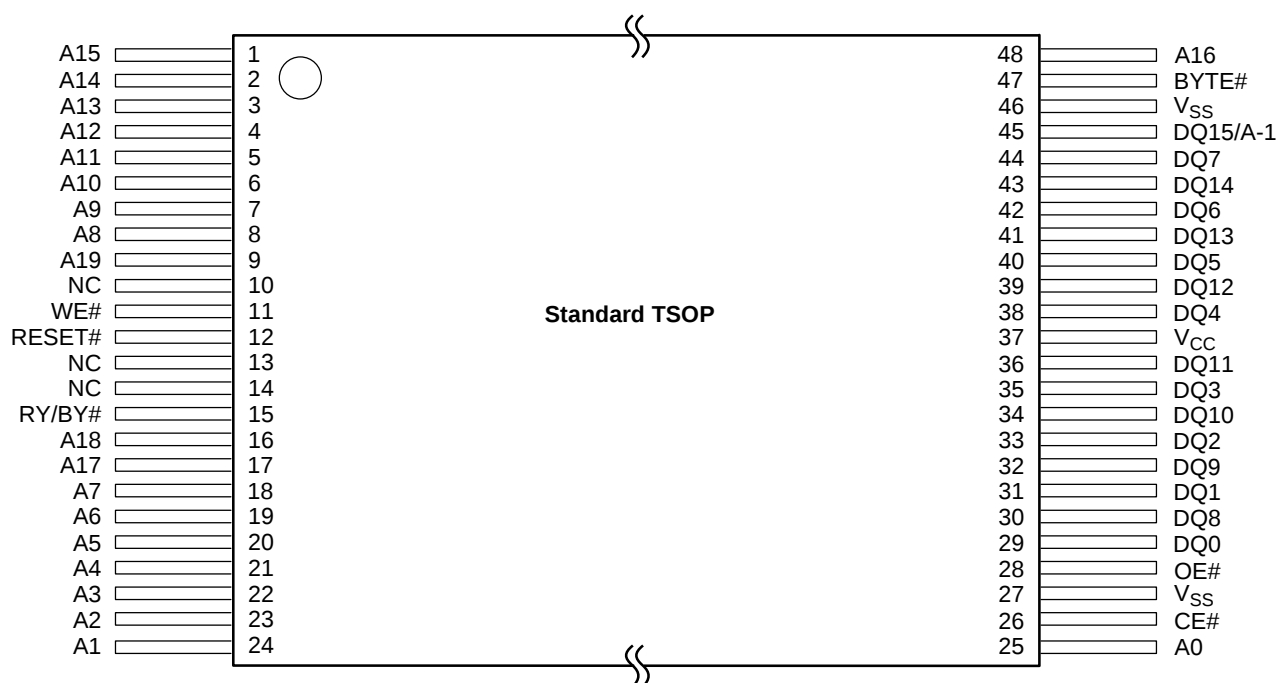
PRODUCT SELECTOR GUIDE

Family Part Number		Am29LV160D		
Speed Option	Voltage Range: $V_{CC} = 2.7\text{--}3.6\text{ V}$	-70	-90	-120
Max access time, ns (t_{ACC})		70	90	120
Max CE# access time, ns (t_{CE})		70	90	120
Max OE# access time, ns (t_{OE})		30	35	50

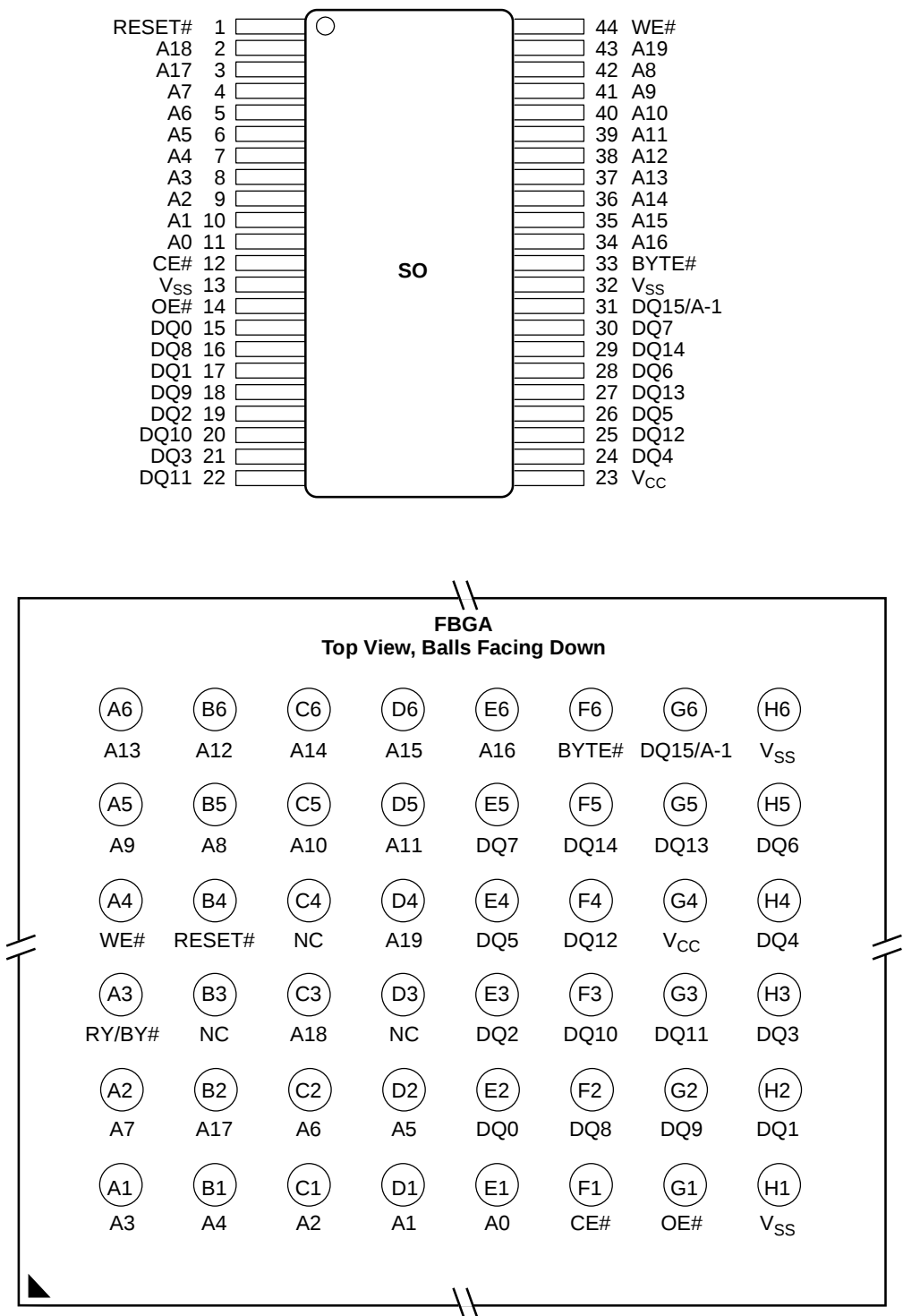
Note: See “AC Characteristics” for full specifications.

BLOCK DIAGRAM


CONNECTION DIAGRAMS

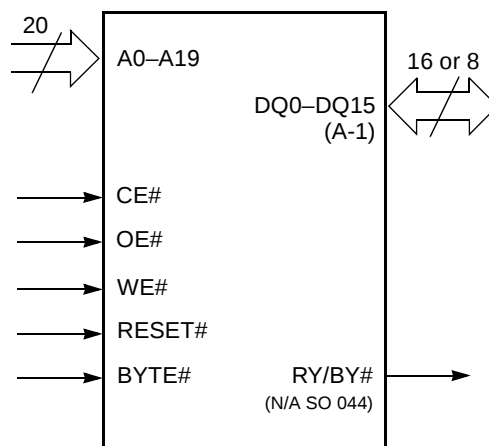


CONNECTION DIAGRAMS



PIN CONFIGURATION

A0–A19	=	20 addresses
DQ0–DQ14	=	15 data inputs/outputs
DQ15/A-1	=	DQ15 (data input/output, word mode), A-1 (LSB address input, byte mode)
BYTE#	=	Selects 8-bit or 16-bit mode
CE#	=	Chip enable
OE#	=	Output enable
WE#	=	Write enable
RESET#	=	Hardware reset pin
RY/BY#	=	Ready/Busy output (N/A SO 044)
V _{CC}	=	3.0 volt-only single power supply (see Product Selector Guide for speed options and voltage supply tolerances)
V _{SS}	=	Device ground
NC	=	Pin not connected internally

LOGIC SYMBOL

8.1 HY57V641620HG

DESCRIPTION

The Hyundai HY57V641620HG is a 67,108,864-bit CMOS Synchronous DRAM, ideally suited for the main memory applications which require large memory density and high bandwidth. HY57V641620HG is organized as 4banks of 1,048,576x16.

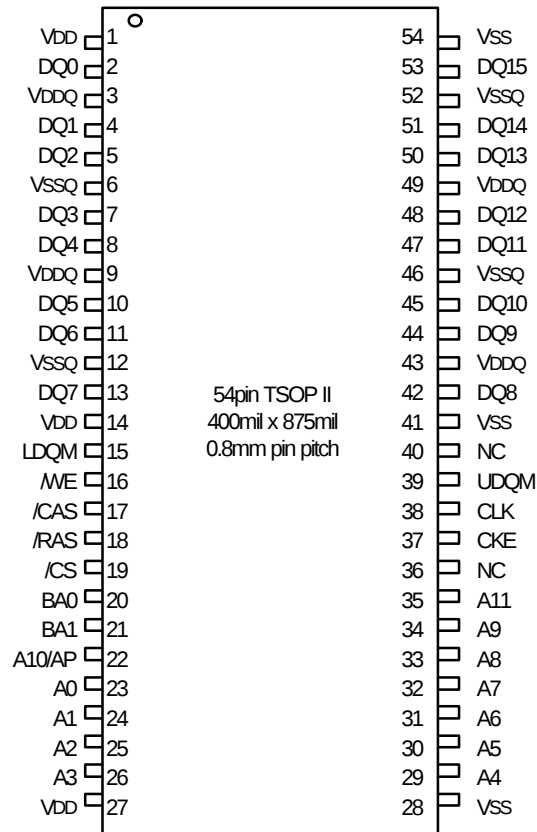
HY57V641620HG is offering fully synchronous operation referenced to a positive edge of the clock. All inputs and outputs are synchronized with the rising edge of the clock input. The data paths are internally pipelined to achieve very high bandwidth. All input and output voltage levels are compatible with LVTTL.

Programmable options include the length of pipeline (Read latency of 2 or 3), the number of consecutive read or write cycles initiated by a single control command (Burst length of 1,2,4,8 or Full page), and the burst count sequence(sequential or interleave). A burst of read or write cycles in progress can be terminated by a burst terminate command or can be interrupted and replaced by a new burst read or write command on any cycle. (This pipelined design is not restricted by a `2N` rule.)

FEATURES

- Single 3.3±0.3V power supply ^{Note)}
- All device pins are compatible with LVTTL interface
- JEDEC standard 400mil 54pin TSOP-II with 0.8mm of pin pitch
- All inputs and outputs referenced to positive edge of system clock
- Data mask function by UDQM or LDQM
- Internal four banks operation
- Auto refresh and self refresh
- 4096 refresh cycles / 64ms
- Programmable Burst Length and Burst Type
 - 1, 2, 4, 8 or Full page for Sequential Burst
 - 1, 2, 4 or 8 for Interleave Burst
- Programmable $\overline{\text{CAS}}$ Latency ; 2, 3 Clocks

PIN CONFIGURATION

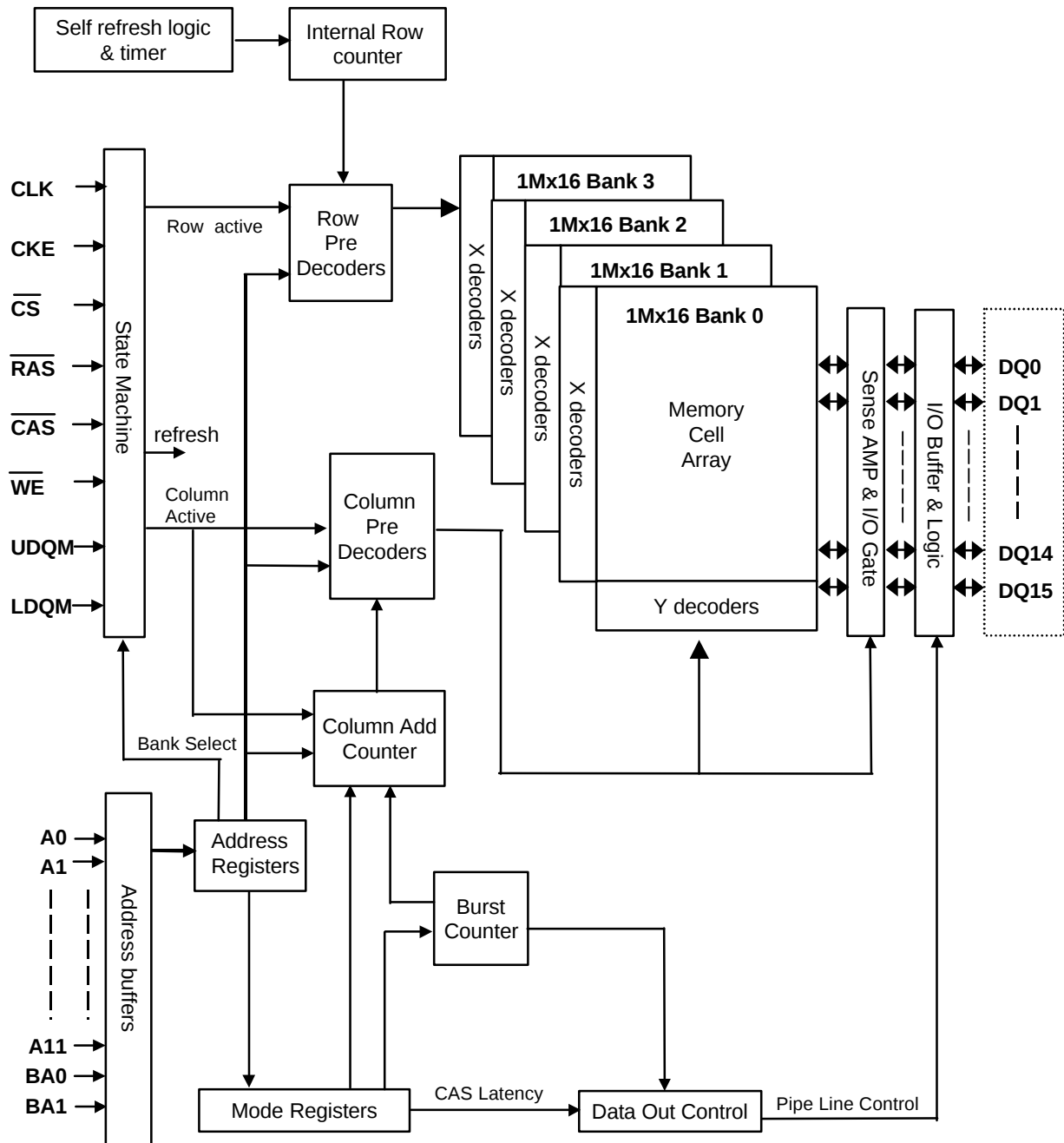


PIN DESCRIPTION

PIN	PIN NAME	DESCRIPTION
CLK	Clock	The system clock input. All other inputs are registered to the SDRAM on the rising edge of CLK
CKE	Clock Enable	Controls internal clock signal and when deactivated, the SDRAM will be one of the states among power down, suspend or self refresh
$\overline{CS}$	Chip Select	Enables or disables all inputs except CLK, CKE and DQM
BA0,BA1	Bank Address	Selects bank to be activated during $\overline{RAS}$ activity Selects bank to be read/written during CAS activity
A0 ~ A11	Address	Row Address : RA0 ~ RA11, Column Address : CA0 ~ CA7 Auto-precharge flag : A10
$\overline{RAS}$, $\overline{CAS}$, $\overline{WE}$	Row Address Strobe, Column Address Strobe, Write Enable	$\overline{RAS}$, $\overline{CAS}$ and $\overline{WE}$ define the operation Refer function truth table for details
LDQM, UDQM	Data Input/Output Mask	Controls output buffers in read mode and masks input data in write mode
DQ0 ~ DQ15	Data Input/Output	Multiplexed data input / output pin
VDD/VSS	Power Supply/Ground	Power supply for internal circuits and input buffers
VDDQ/VSSQ	Data Output Power/Ground	Power supply for output buffers
NC	No Connection	No connection

FUNCTIONAL BLOCK DIAGRAM

1Mbit x 4banks x 16 I/O Synchronous DRAM



8.2 MT1389

MT1389

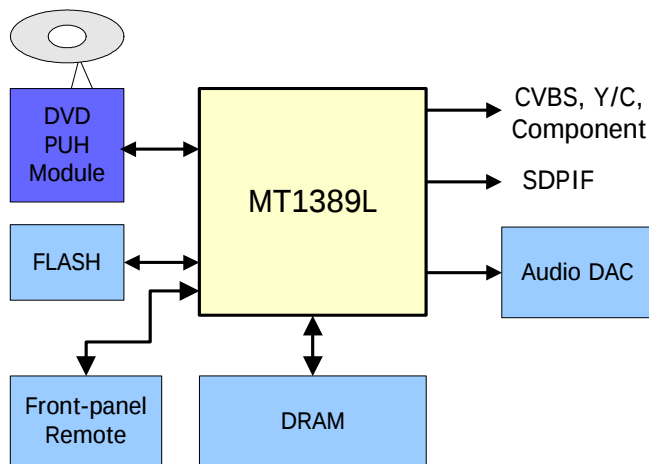
Progressive-Scan DVD Player SOC

Specifications are subject to change without notice

MediaTek MT1389 is a DVD player system-on-chip (SOC) which incorporates advanced features like high quality TV encoder and state-of-art de-interlace processing. The MT1389 enables consumer electronics manufacturers to build high quality, cost-effective DVD players, portable DVD players or any other home entertainment audio/video devices.

Based on MediaTek's world-leading DVD player SOC architecture, the MT1389 is the 3rd generation of the DVD player SOC. It integrates the MediaTek 2nd generation front-end analog RF amplifier and the Servo/MPEG AV decoder.

The progressive scan of the MT1389 utilized a proprietary advanced motion-adaptive de-interlace algorithm to achieve the best movie/video playback. It can easily detect 3:2/2:2 pull down source and restore the correct original pictures. It also supports a patent-pending edge-preserving algorithm to remove the saw-tooth effect.



DVD Player System Diagram Using MT1389

Key Features

- RF/Servo/MPEG Integration
- High Performance Audio Processor
- Motion-Adaptive, Edge-Preserving De-interlace
- 108MHz/12-bit, 6 CH TV Encoder

Applications

- Standard DVD Players
- Portable DVD Players

General Feature List

- Super Integration DVD player single chip
 - High performance analog RF amplifier
 - Servo controller and data channel processing
 - MPEG-1/MPEG-2/JPEG video
 - Dolby AC-3/DTS/DVD-Audio
 - Unified memory architecture
 - Versatile video scaling & quality enhancement
 - OSD & Sub-picture
 - 2-D graphic engine
 - Built-in clock generator
 - Built-in high quality TV encoder
 - Built-in progressive video processor
 - Audio effect post-processor
 - Audio input port
- High Performance Analog RF Amplifier
 - Programmable fc
 - Dual automatic laser power control
 - Defect and blank detection
 - RF level signal generator
- Speed Performance on Servo/Channel Decoding
 - DVD-ROM up to 4XS
 - CD-ROM up to 24XS
- Channel Data Processor
 - Digital data slicer for small jitter capability
 - Built-in high performance data PLL for channel data demodulation
 - EFM/EFM+ data demodulation
 - Enhanced channel data frame sync protection & DVD-ROM sector sync protection
- Servo Control and Spindle Motor Control
 - Programmable frequency error gain and phase error gain of spindle PLL to control spindle motor on CLV and CAV mode
 - Built-in ADCs and DACs for digital servo control
 - Provide 2 general PWM
 - Tray control can be PWM output or digital output
- Embedded Micro controller
 - Built-in 8032 micro controller
 - Built-in internal 373 and 8-bit programmable lower address port
- 1024-bytes on-chip RAM
- Up to 4M bytes FLASH-programming interface
- Supports 5/3.3-Volt. FLASH interface
- Supports power-down mode
- Supports additional serial port
- DVD-ROM/CD-ROM Decoding Logic
 - High-speed ECC logic capable of correcting one error per each P-codeword or Q-codeword
 - Automatic sector Mode and Form detection
 - Automatic sector Header verification
 - Decoder Error Notification Interrupt that signals various decoder errors
 - Provide error correction acceleration
- Buffer Memory Controller
 - Supports 16Mb/32Mb/64Mb/128Mb SDRAM
 - Supports 16-bit SDRAM data bus
 - Provide the self-refresh mode SDRAM
 - Block-based sector addressing
 - Support 3.3 Volt. DRAM Interface
- Video Decode
 - Decodes MPEG1 video and MPEG2 main level, main profile video (720/480 and 720x576)
 - Smooth digest view function with I, P and B picture decoding
 - Baseline, extended-sequential and progressive JPEG image decoding
 - Support CD-G titles
- Video/OSD/SPU/HLI Processor
 - Arbitrary ratio vertical/horizontal scaling of video, from 0.25X to 256X
 - 65535/256/16/4/2-color bitmap format OSD,
 - 256/16 color RLC format OSD
 - Automatic scrolling of OSD image
 - Slide show transition as DVD-Audio Specification
- 2-D Graphic Engine
 - Support decode Text and Bitmap
 - Support line, rectangle and gradient fill
 - Support bitblt
 - Chroma key copy operation
 - Clip mask

■ Audio Effect Processing

- Dolby Digital (AC-3)/EX decoding
- DTS/DTS-ES decoding
- MLP decoding for DVD-Audio
- MPEG-1 layer 1/layer 2 audio decoding
- MPEG-2 layer1/layer2 2-channel audio
- High Definition Compatible Digital (HDCD)
- Windows Media Audio (WMA)
- Advanced Audio Coding (AAC)
- Dolby ProLogic II
- Concurrent multi-channel and downmix out
- IEC 60958/61937 output
 - PCM / bit stream / mute mode
 - Custom IEC latency up to 2 frames
- Pink noise and white noise generator
- Karaoke functions
 - Microphone echo
 - Microphone tone control
 - Vocal mute/vocal assistant
 - Key shift up to +/- 8 keys
 - Chorus/Flanger/Harmony/Reverb
- Channel equalizer
- 3D surround processing include virtual surround and speaker separation

■ TV Encoder

- Six 108MHz/12bit DACs
- Support NTSC, PAL-BDGHINM, PAL-60
- Support 525p, 625p progressive TV format
- Automatically turn off unconnected channels
- Support PC monitor (VGA)
- Support Macrovision 7.1 L1, Macrovision 525P and 625P
- CGMS-A/WSS
- Closed Caption

■ Progressive Output

- Automatic detect film or video source
- 3:2 pull down source detection
- Advanced Motion adaptive de-interlace
- Edge Preserving
- Minimum external memory requirement

■ Audio Input

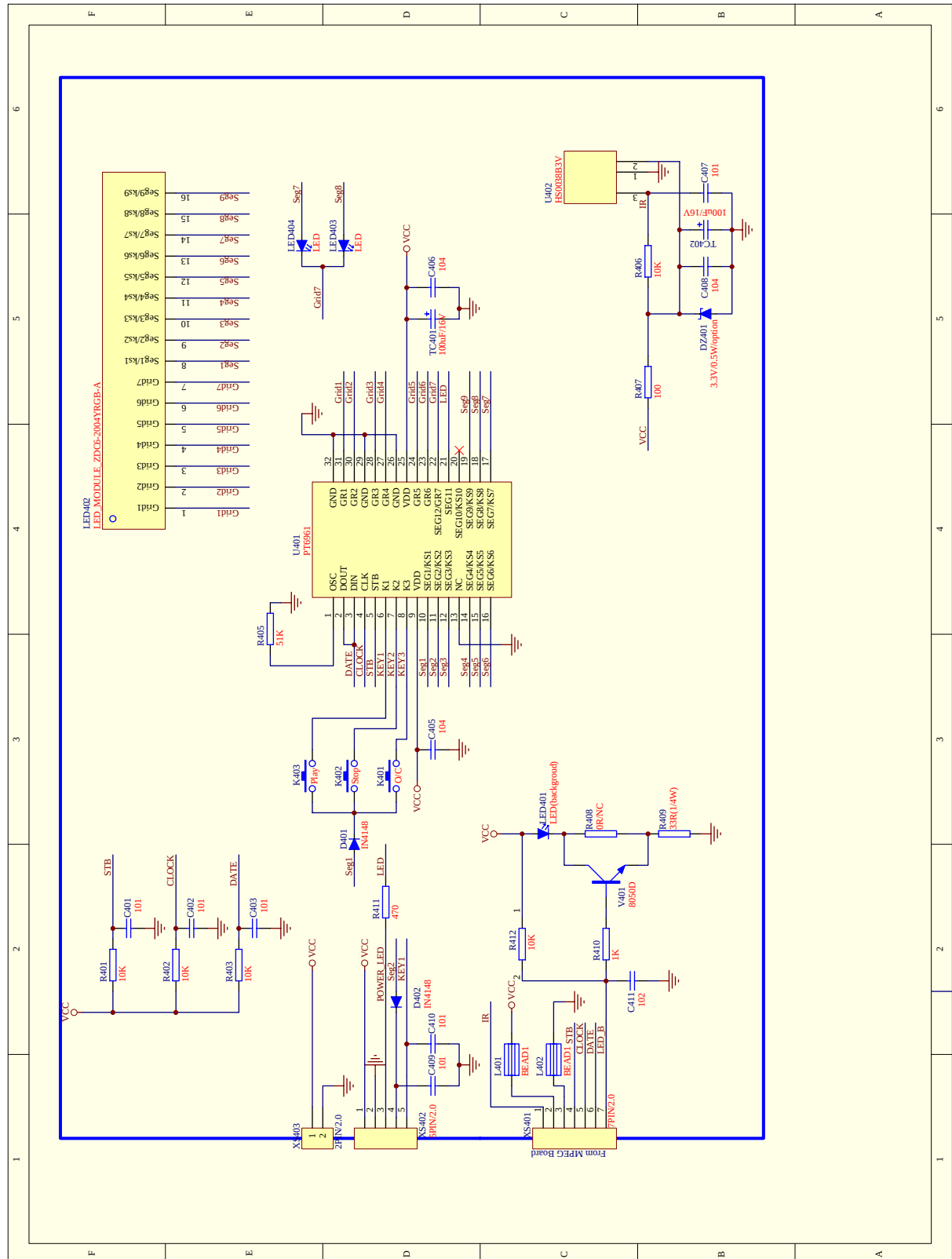
- Line-in/SPDIF-in for versatile audio processing

■ Outline

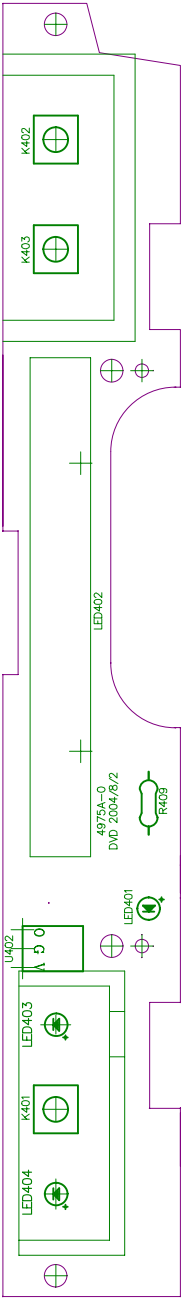
- 256-pin LQFP package
- 3.3/1.8-Volt. Dual operating voltages

9. SCHEMATIC & PCB WIRING DIAGRAM

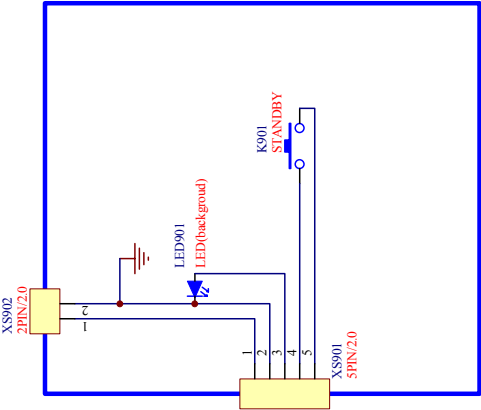
FRONT SCHEMATIC DIAGRAM



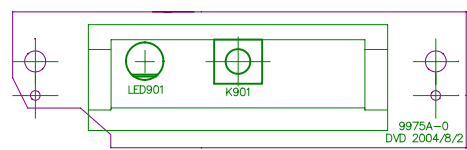
FRONT SCHEMATIC DIAGRAM



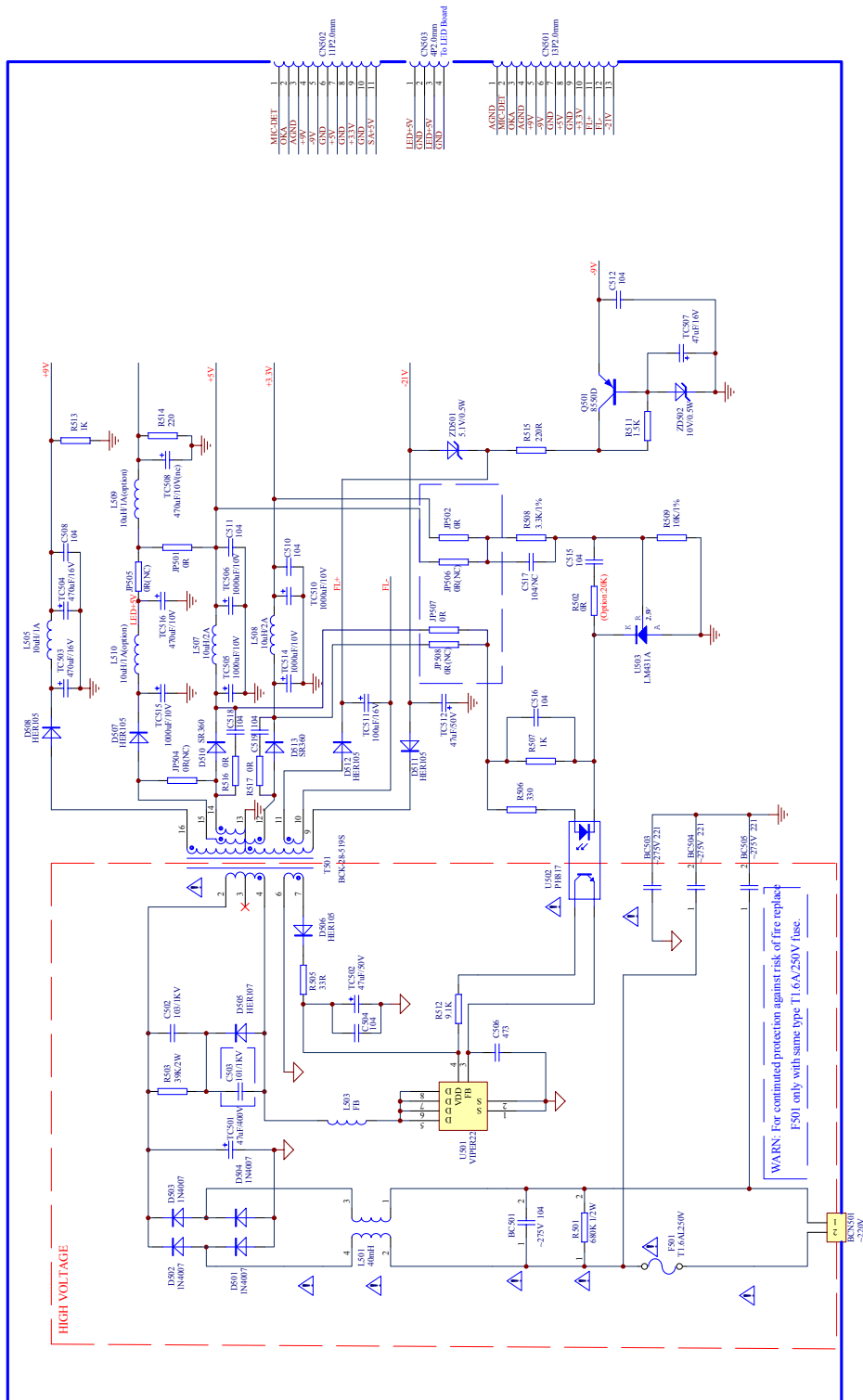
FRONT SCHEMATIC DIAGRAM



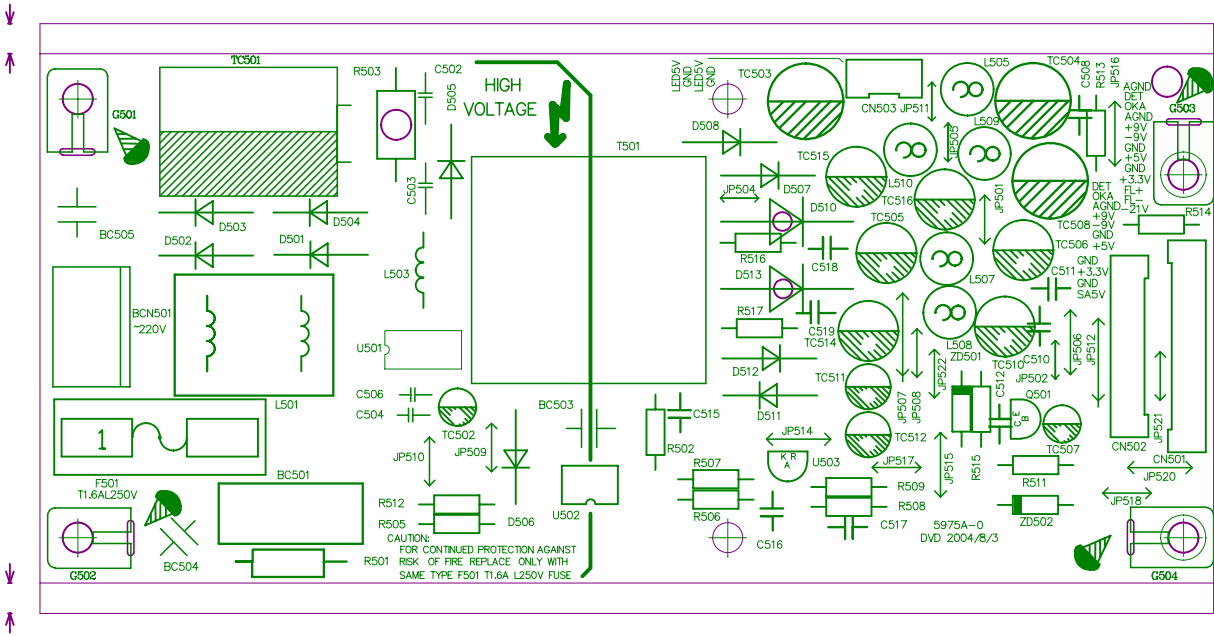
FRONT SCHEMATIC DIAGRAM



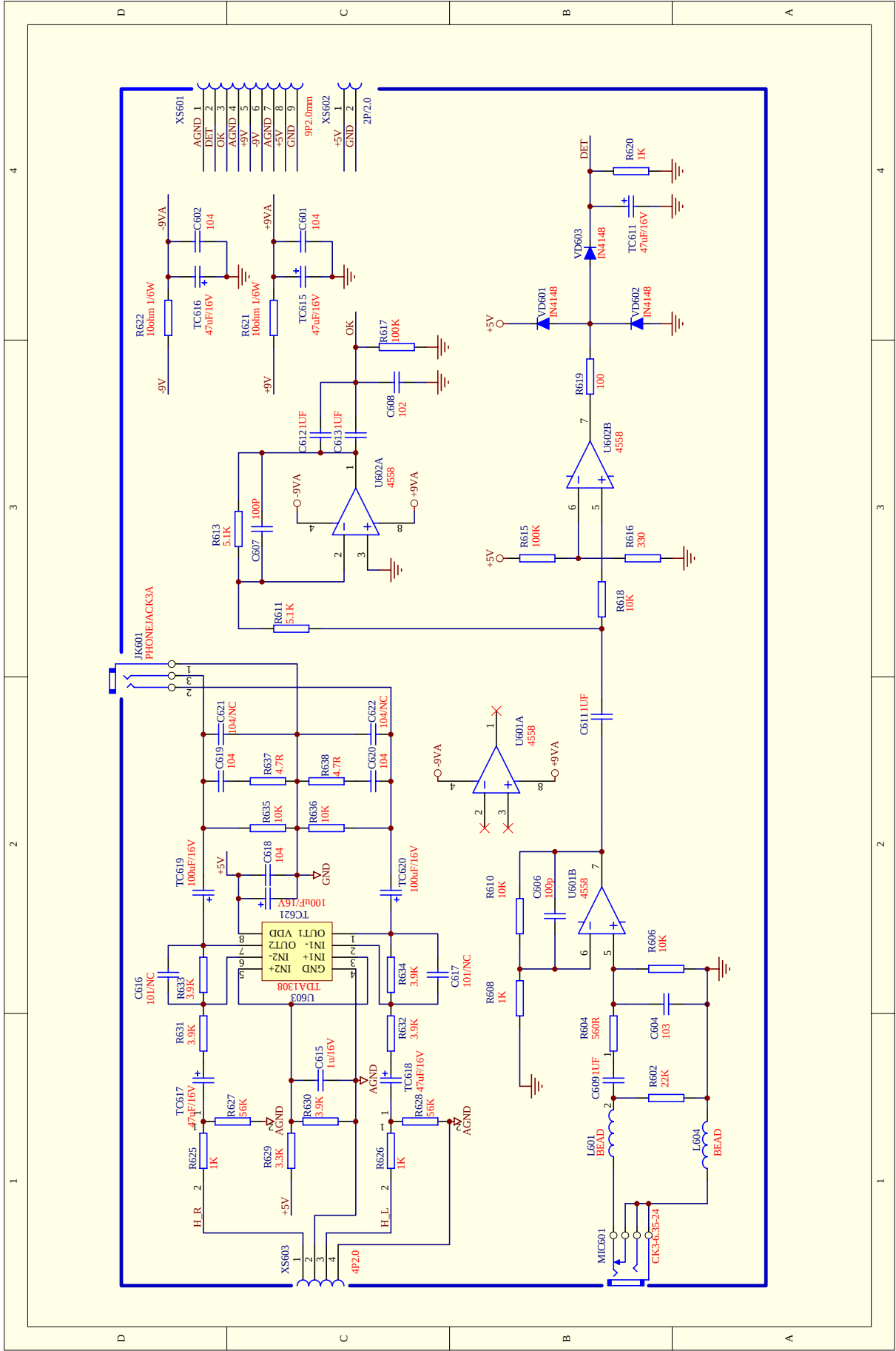
POWER BOARD SCHEMATIC DIAGRAM



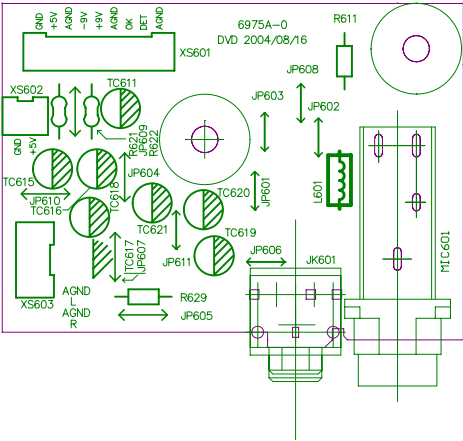
POWER BOARD SCHEMATIC DIAGRAM



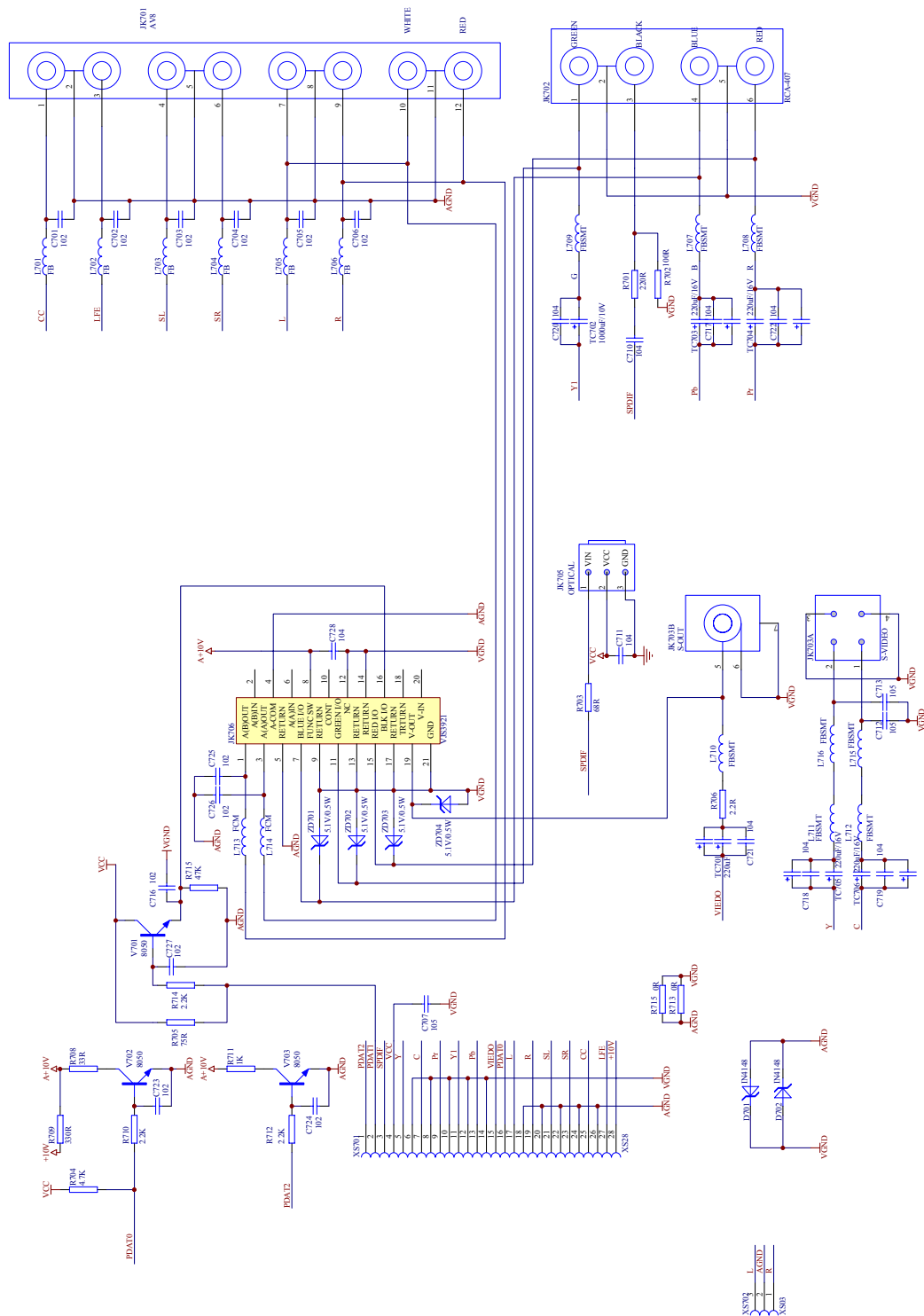
OK SCHEMATIC DIAGRAM



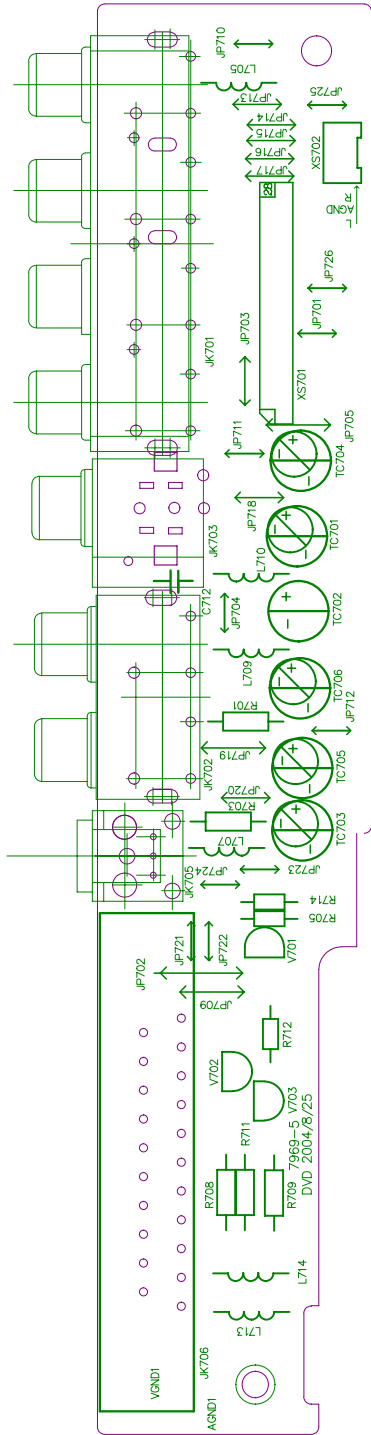
OK SCHEMATIC DIAGRAM



OUTPUT BOARD SCHEMATIC DIAGRAM

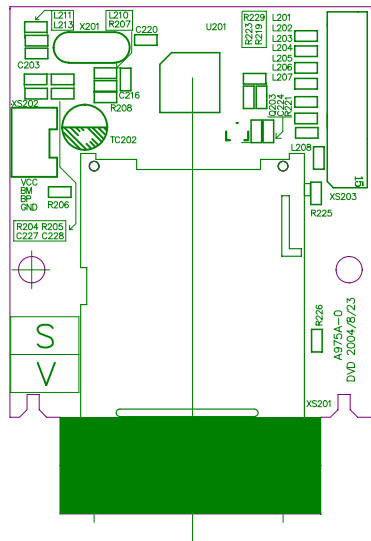


OUTPUT BOARD SCHEMATIC DIAGRAM

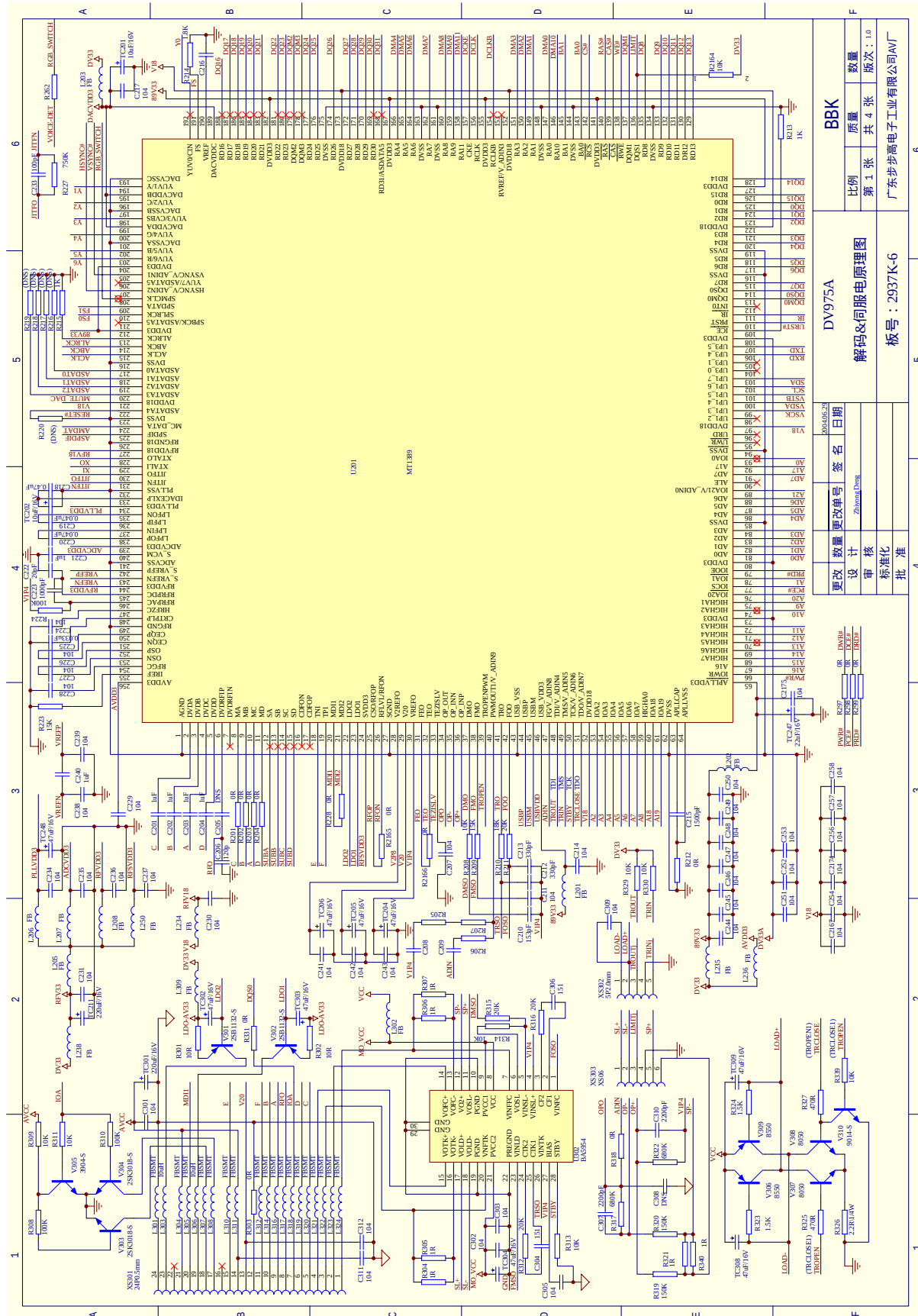


[illegible]

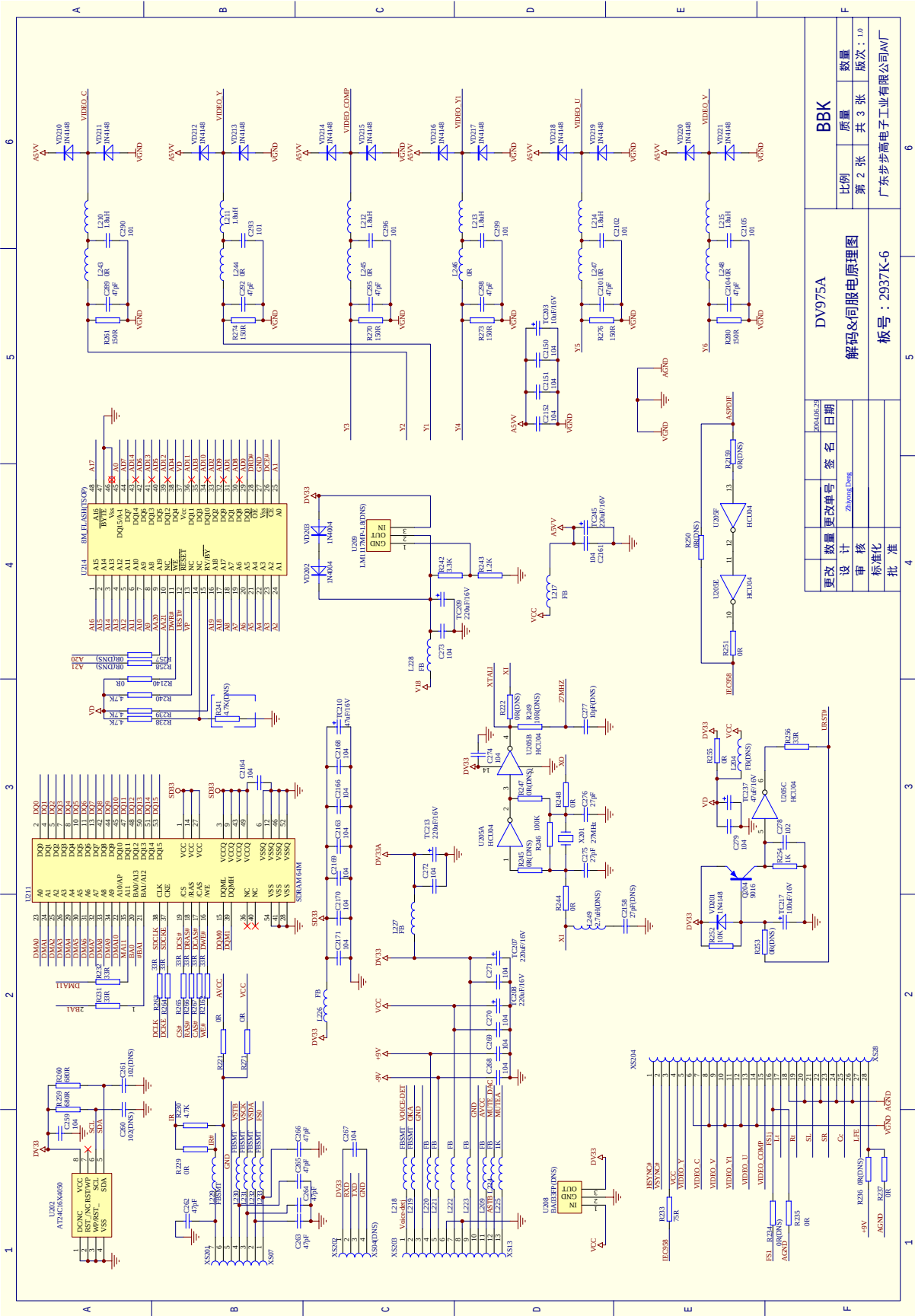
OUTPUT BOARD SCHEMATIC DIAGRAM



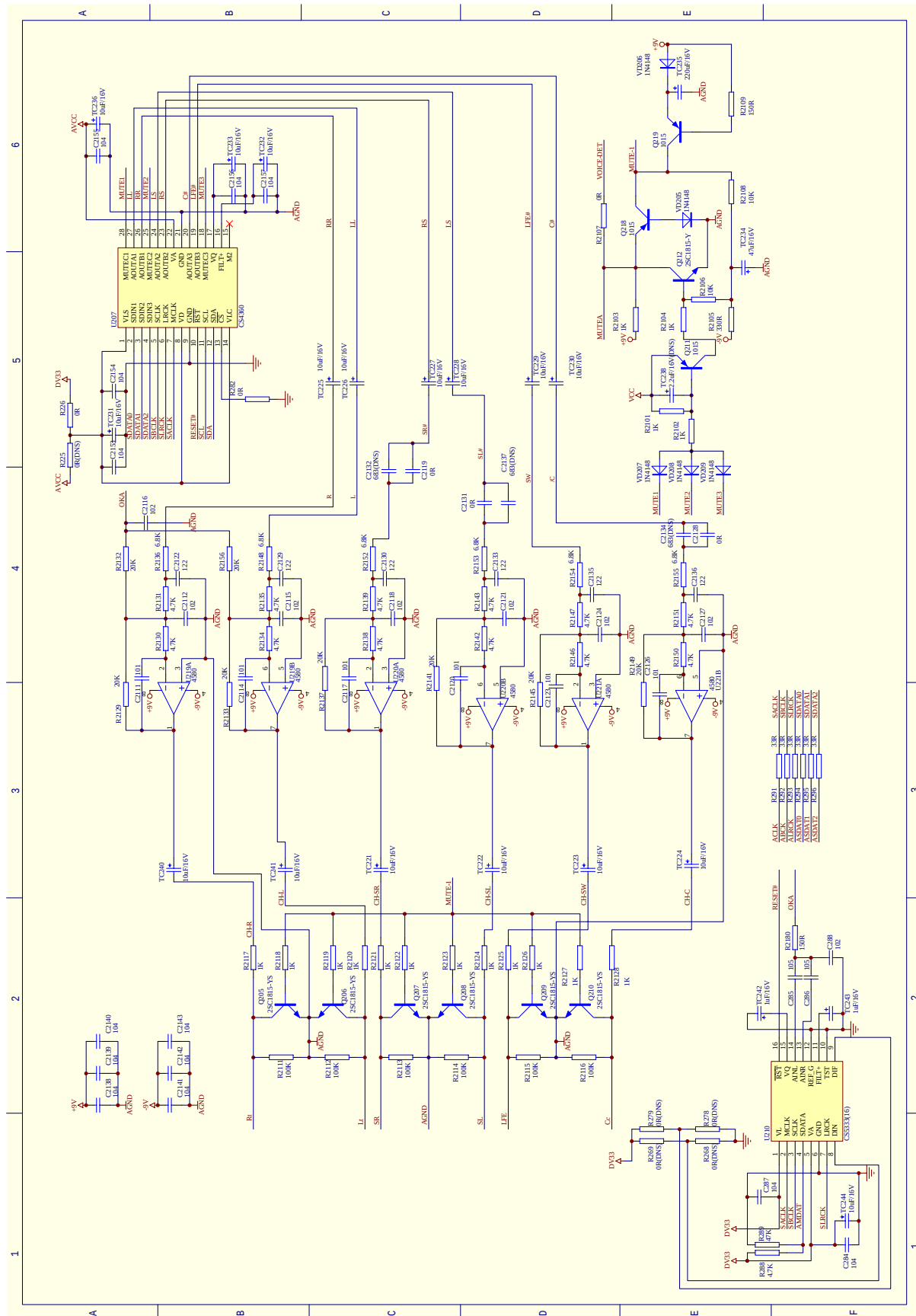
MIAN SCHEMATIC DIAGRAM



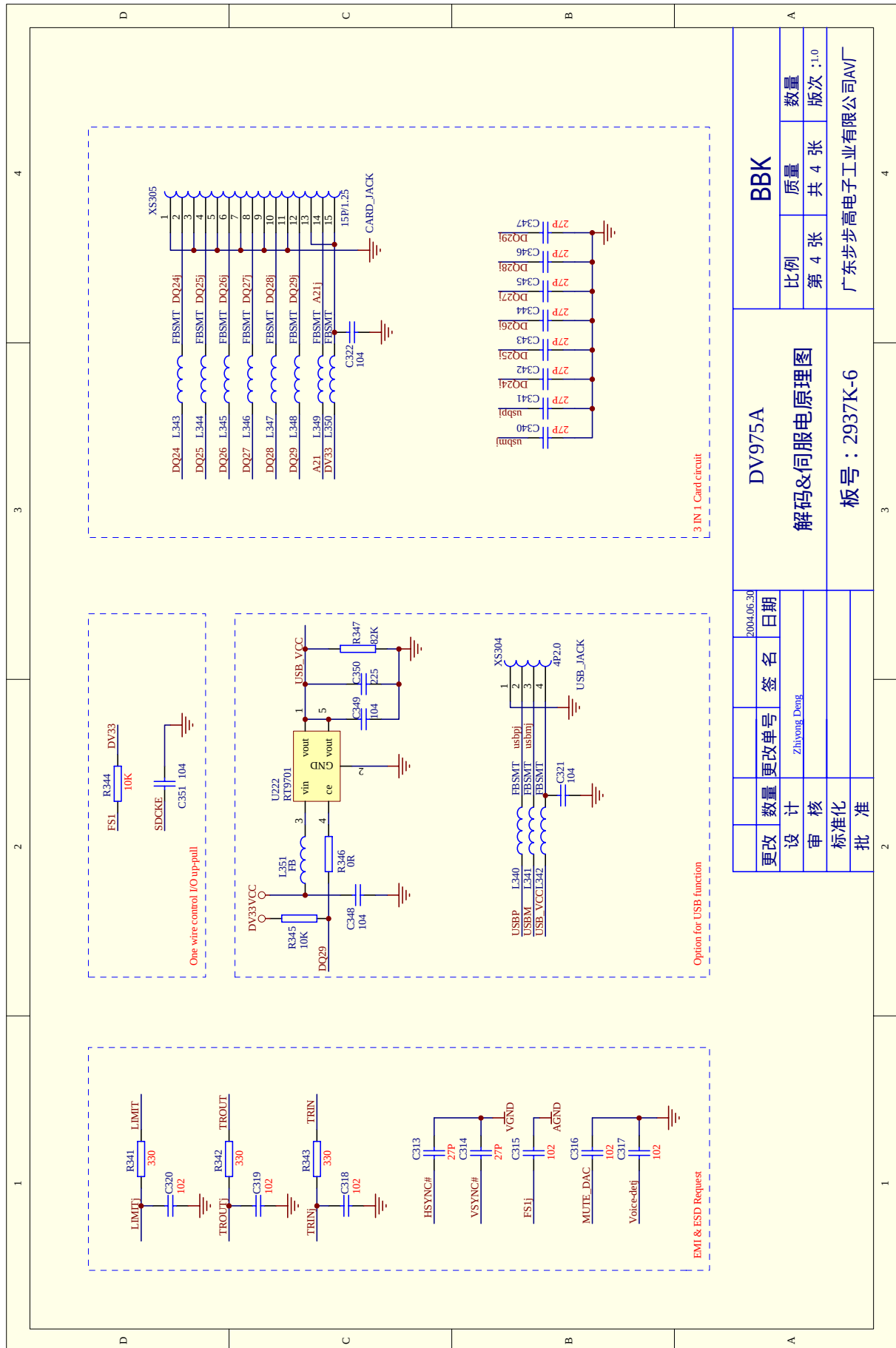
MIAN SCHEMATIC DIAGRAM



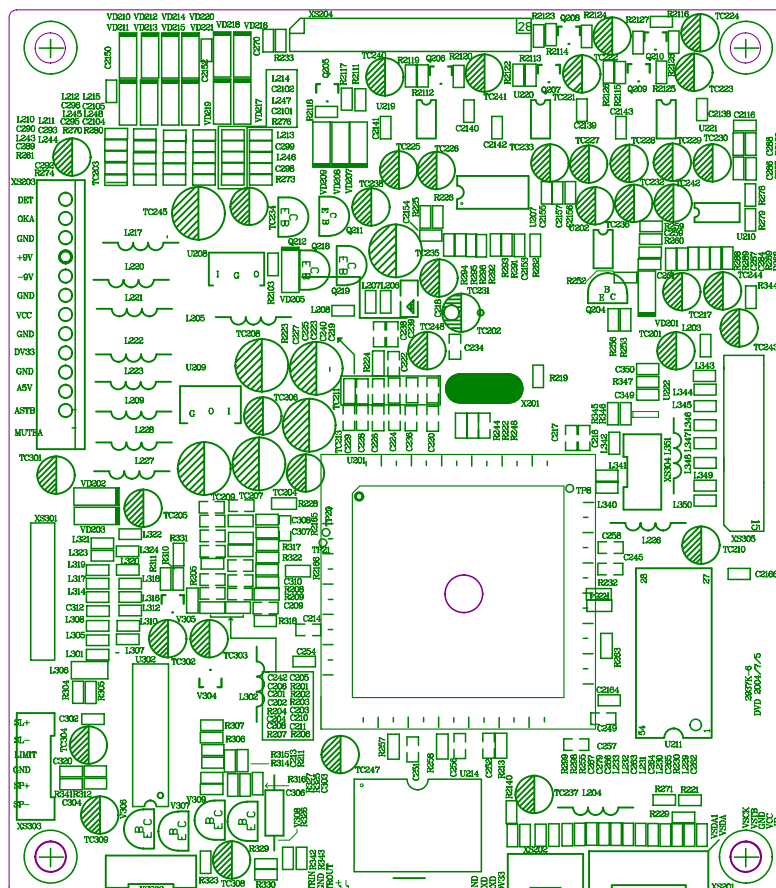
MIAN SCHEMATIC DIAGRAM



MIAN SCHEMATIC DIAGRAM



MIAN SCHEMATIC DIAGRAM



10. SPARE PARTS LIST

DV968S MATERIAL LIST

1. POWER BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTITY	LOCATION
0000273	CARBON FILM RESISTOR	1/4W33Ω±5% SHAPED 10	PCS	1	R505
0000274	CARBON FILM RESISTOR	1/4W47Ω±5% SHAPED 10	PCS	1	R515
0000362	CARBON FILM RESISTOR	1/4W220Ω±5% SHAPED 10	PCS	1	R514
0000278	CARBON FILM RESISTOR	1/4W330Ω±5% SHAPED 10	PCS	1	R506
0000283	CARBON FILM RESISTOR	1/4W1K±5% SHAPED 10	PCS	1	R507
0000284	CARBON FILM RESISTOR	1/4W1.5K±5% SHAPED 10	PCS	1	R511
0000461	CARBON FILM RESISTOR	1/4W9.1K±5% SHAPED 10	PCS	2	R512,R513
0000298	CARBON FILM RESISTOR	1/4W20K±5% SHAPED 10	PCS	1	R502
0010115	METAL FILM RESISTOR	1/4W3.3K±1% SHAPED 10	PCS	1	R508
0010064	METAL FILM RESISTOR	1/4W10K±1% SHAPED 10	PCS	1	R509
0010159	METAL OXIDE FILM RESISTOR	2W39K±5% SHAPED FLAT 15×7	PCS	1	R503
0070001	HIGH VOLTAGE RESISTOR	1/2W680K±5%	PCS	1	R501
0200136	PORCELAIN CAPACITOR	50V 473 ±20% 5mm	PCS	1	C506
0200138	PORCELAIN CAPACITOR	50V 104 ±20% 5mm	PCS	6	C504,C508,C510~C512,C515
0200229	CERAMIC CAPACITOR	CT81 250VAC471±10% 10mm	PCS	1	BC503
0200223	PORCELAIN CAPACITOR	1000V 101 +80%-20% 7.5mm	PCS	1	C503
0200228	PORCELAIN CAPACITOR	1000V 101 ±10% 7.5mm	PCS	1	C503
0200224	PORCELAIN CAPACITOR	1000V 103 +80%-20% 7.5mm	PCS	1	C502
0210116	ANTI-DISTURBANCE CAPACITOR	MKP61 X2 275VAC 104±20%15	PCS	1	BC501
0210066	TERYLENE CAPACITOR	275V 104 ±20% 15mm	PCS	1	BC501
0210070	TERYLENE CAPACITOR	275V 104 ±10% 15mm	PCS	1	BC501
0260557	CD	CD11T 16V100u±20%6×12 2.5	PCS	1	TC507
0260559	CD	CD11T 50V47u±20%6×12 2.5	PCS	2	TC502,TC512
0260558	CD	CD11T 25V470u±20%10×16 5	PCS	4	TC503,TC508,TC504,TC516
0260560	CD	CD11T 10V1000u±20%8×16 3.5	PCS	5	TC505,TC506,TC510,TC514,TC515
0260605	CD	KM 400V47U±20%16×25 7.5	PCS	1	TC501
0410010	CHOKE CIOL	VERTICAL 10UH 1A 5mm	PCS	3	L505,L509,L510
0410011	CHOKE CIOL	VERTICAL 10UH 2A 5mm	PCS	2	L507,L508
0570013	DIODE	HER105	PCS	3	D506,D508,D511
0680007	SCHOTTKY DIODE	SR360	PCS	2	D510, D513
0570014	DIODE	HER107	PCS	1	D505
0570005	DIODE	1N4007	PCS	4	D501~D504
0680013	SCHOTTKY DIODE	1N5819	PCS	1	D507
0580006	VOLTAGE REGULATOR DIODE	5.1V 1/2W	PCS	1	ZD501
0580009	VOLTAGE REGULATOR DIODE	9.1V 1/2W	PCS	1	ZD502
0881933	IC	VIPER22A DIP8	PCS	1	U501
0880553	IC	LM431ACZ TO-92	PCS	1	U503
0880581	IC	TL431C TO-226AA(LP)	PCS	1	U503
0880800	IC	431L TO-92	PCS	1	U503
0882041	IC	MIK431C TO-92	PCS	1	U503
0390057	MAGNETIC BEADS INDUCTOR	RH354708	PCS	1	L503
1080011	PHOTOELECTRIC COUPLER	HS817	PCS	1	U502
1080006	PHOTOELECTRIC COUPLER	PC817	PCS	1	U502

0780049	TRIODE	S8550D	PCS	1	Q501
1000022	POWER GRID FILTER	JLB1153 33uH + ∞ -0%	PCS	1	L501
0460422	SWITCHING POWER TRANSFORMER	BCK-28-519S	PCS	1	T501
1940044	SOCKET	9P 2.0mm	PCS	1	CN501 (AGND,DET,OKA,AGND,+9V,-9V,GND,+5V,GND)
1940027	SOCKET	2P 2.0mm	PCS	1	CN503 (NEAR JP511, LED+5V,GND)
1940077	SOCKET	11P 2.0mm	PCS	1	CN502
1940045	SOCKET	2P 8.0mm 2#	PCS	1	BCN501
2300007	FUSE	T1.6AL 250V	PCS	1	F501
3020402	FUSE HOLDER	BLX-2	PCS	1	F501
2100010	CONNECTION CORDS	Φ 0.6 SHAPED 5mm	PCS	3	JP502,JP504,JP511
2100003	CONNECTION CORDS	Φ 0.6 SHAPED 7.5mm	PCS	8	JP501,JP508~JP510,JP517~JP518,JP521,JP522
2100004	CONNECTION CORDS	Φ 0.6 SHAPED 10mm	PCS	4	JP514~JP516,JP520
2100006	CONNECTION CORDS	Φ 0.6 SHAPED 12.5mm	PCS	1	JP512
3870115	GROUND CHIP OF POWER BOARD	AB903	PCS	2	G503,G504
1563305	PCB	5975A-0	PCS	1	

2. MAIN BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTITY	LOCATION
2360026	IR SENSOR	AT138BV3 PIN LENGTH 27mm	PCS	1	U402
0090001	SMD RESISTOR	1/16W 0 Ω $\pm$ 5% 0603	PCS	1	L402
0000431	CARBON FILM RESISTOR	1/4W75 Ω $\pm$ 5% SHAPED 10	PCS	1	R409
90181	SMD RESISTOR	1/16W 100 Ω $\pm$ 5% 0603	PCS	1	R407
0090008	SMD RESISTOR	1/16W 220 Ω $\pm$ 5% 0603	PCS	2	R413,R414
0090011	SMD RESISTOR	1/16W 470 Ω $\pm$ 5% 0603	PCS	1	R411
90014	SMD RESISTOR	1/16W 1K $\pm$ 5% 0603	PCS	1	R410
0090023	SMD RESISTOR	1/16W 10K $\pm$ 5% 0603	PCS	4	R401,R402,R403,R406
0090192	SMD RESISTOR	1/16W 51K $\pm$ 5% 0603	PCS	1	R405
0310084	SMD CAPACITOR	50V 104 +80%-20% 0603	PCS	3	C405,C406,C408
0310047	SMD CAPACITOR	50V 101 $\pm$ 5% NPO 0603	PCS	6	C401,C402,C403,C407,C409,C410
0260201	CD	CD11C 16V100U $\pm$ 20%6 $\times$ 7 2.5	PCS	2	TC401, TC402
0700007	SMD DIODE	1N4148	PCS	2	D401,D402
0700001	SMD DIODE	LS4148	PCS	2	D401,D402
0700002	SMD DIODE	LL4148	PCS	2	D401,D402
0780085	SMD TRIODE	8050D	PCS	1	V401
0881426	IC	PT6961 SOP	PCS	1	U401
0620076	RADIATION DIODE	3B3HC COLORLESS WITH BLUE	PCS	2	LED403,LED404
1200621	LED SCREEN	TOS-2701BG-B29	PCS	1	LED402
0620143	LED GROUND LIGHT SOURCE	TOLG-2701MB	PCS	1	LED401
1631760	PCB	4975A-0	PCS	1	
2121594	FLAT CABLE	7P110 2.0 2 SOCKET WITH L NEEDLE REVERSE	PCS	1	XS401
2150184	SCREEN-SHIELDED CORD	28# 215 4P SCREEN-SHIELDED, WHITE, RED, BLACK AND YELLOW	PCS	1	XS402

1340003	LIGHT TOUCH RESTORE SWITCH	HORIZONTAL 6×6×1	PCS	3	K401 ~ K403
5232926	ALUMINUM FOIL STICKER	150×6×0.1 SINGLE-SIDED WITH GLUE ON THE BACK	PCS	1	BETWEEN LED AND RADIATION SCREEN
5233018	SOFT SPONGE SPACER	10×6×16 DOUBLE-FACED, HARD	PCS	2	CONNECT VFD SCREEN AND FRONT PANEL PCB
5232919	SOFT SPONGE SPACER	7×7×10 DOUBLE-FACED, HARD	PCS	2	CONNECT IR SENSOR WITH FRONT PANEL PCB

3. SUBSIDIARY BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTITY	LOCATION
1340003	LIGHT TOUCH RESTORE SWITCH	HORIZONTAL 6×6×1	PCS	1	K901
1940024	SOCKET	5P 2.0mm	PCS	1	XS901
0620002	RADIATION DIODE	Φ3 RED	PCS	1	LED901
1940027	SOCKET	2P 2.0mm	PCS	1	XS902
1631759	PCB	9975A-0	PCS	1	

4. SUBSIDIARY AV BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTITY	LOCATION
0090001	SMD RESISTOR	1/16W 0Ω ±5% 0603	PCS	1	R210
0090313	SMD RESISTOR	1/16W 6.8Ω ±5% 0603	PCS	1	R212
0090237	SMD RESISTOR	1/16W 39Ω ±5% 0603	PCS	2	R207,R208
90016	SMD RESISTOR	1/16W 1.5K ±5% 0603	PCS	1	R206
0090023	SMD RESISTOR	1/16W 10K ±5% 0603	PCS	10	R201~R203,R214~R217,R223,R224,R228
0090028	SMD RESISTOR	1/16W 33K ±5% 0603	PCS	2	R204,R205
0090034	SMD RESISTOR	1/16W 100K ±5% 0603	PCS	2	R213,R221
0090109	SMD RESISTOR	1/16W 1MΩ ±5% 0603	PCS	1	R211
0260327	CD	GZ16V100U±20%6×12 2.5	PCS	1	TC202
0310190	SMD CAPACITOR	50V 27P ±5% NPO 0603	PCS	2	C221,C222
0310084	SMD CAPACITOR	50V 104 +80%-20% 0603	PCS	9	C202,C203,C214,C218,C220,C223~C226
0310058	SMD CAPACITOR	25V 104 +80%-20% 0603	PCS	9	C202,C203,C214,C218,C220,C223~C226
0310234	SMD CAPACITOR	16V 105 +80%-20% 0603	PCS	2	C215,C216
0390095	SMD MAGNETIC BEADS	FCM1608K-221T05	PCS	5	L210~L214
0882202	IC	AU9362A21-MCL QFP	PCS	1	U201
0960019	CRYSTAL OSCILLATOR	12.00MHz 49-S	PCS	1	X201
0790041	FIELD EFFECT TRANSISTOR	SI2305DS SOT-23	PCS	2	Q201,Q203
1990026	3-IN-1 CARD SEAT	SD/MS/MMC 23 芯 H=4.2 BOTTO	PCS	1	XS201
1563303	PCB	A975A-0	PCS	1	
1940022	SOCKET	4P 2.0mm	PCS	1	XS202

5. OK BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTITY	LOCATION
0090004	SMD RESISTOR	1/16W 22Ω ±5% 0603	PCS	2	R637,R638
0090181	SMD RESISTOR	1/16W 100Ω ±5% 0603	PCS	1	R619
0090009	SMD RESISTOR	1/16W 330Ω ±5% 0603	PCS	1	R616
0090012	SMD RESISTOR	1/16W 560Ω ±5% 0603	PCS	1	R604
0090014	SMD RESISTOR	1/16W 1K ±5% 0603	PCS	4	R608,R620,R625,R626

0000385	CARBON FILM RESISTOR	1/6W3.9K±5% SHAPED 7.5	PCS	1	R629
0090224	SMD RESISTOR	1/16W 3.9K ±5% 0603	PCS	1	R630
0090020	SMD RESISTOR	1/16W 5.1K ±5% 0603	PCS	1	R613
0000134	CARBON FILM RESISTOR	1/6W5.1K±5% SHAPED 7.5	PCS	1	R611
0090023	SMD RESISTOR	1/16W 10K ±5% 0603	PCS	5	R606,R610,R618,R635, R636
0090026	SMD RESISTOR	1/16W 22K ±5% 0603	PCS	5	R602,R631~R634
0090030	SMD RESISTOR	1/16W 56K ±5% 0603	PCS	2	R627,R628
0000118	CARBON FILM RESISTOR	1/6W10Ω±5% SHAPED 7.5	PCS	2	R621,R622
0090034	SMD RESISTOR	1/16W 100K ±5% 0603	PCS	2	R615,R617
0310047	SMD CAPACITOR	50V 101 ±5% NPO 0603	PCS	2	C606,C607
0310072	SMD CAPACITOR	50V 103 ±10% 0603	PCS	1	C604
0310207	SMD CAPACITOR	50V104 ±20% 0603	PCS	5	C601,C602,C618~C620
0310066	SMD CAPACITOR	50V 102 ±10% 0603	PCS	1	C608
0310234	SMD CAPACITOR	16V 105 +80%-20% 0603	PCS	5	C609,C611~C613,C615
0390095	SMD MAGNETIC BEADS	FCM1608K-221T05	PCS	1	L604
0390057	MAGNETIC BEADS INDUCTOR	RH354708	PCS	1	L601
0260200	CD	CD11C 16V47U±20%5×7 2	PCS	5	TC611,TC615~TC618
260201	CD	CD11C 16V100U±20%6×7 2.5	PCS	3	TC619~TC621
880185	IC	NJM4558M SOP	PCS	2	U601,U602
0880562	IC	4580 SOP	PCS	2	U601,U602
0880361	IC	4558 SOP	PCS	2	U601,U602
0881537	IC	TDA1308 SOP	PCS	1	U603
1563304	PCB	6975A-0	PCS	1	
1940027	SOCKET	2P 2.0mm	PCS	1	XS602
1940022	SOCKET	4P 2.0mm	PCS	1	XS603
1940044	SOCKET	9P 2.0mm	PCS	1	XS601
1980018	MICROPHONE SOCKET	CK3-6.35-24	PCS	1	MIC601
0700007	SMD DIODE	1N4148	PCS	3	VD601,VD602,VD603
0700001	SMD DIODE	LS4148	PCS	3	VD601,VD602,VD603
0700002	SMD DIODE	LL4148	PCS	3	VD601,VD602,VD603
1980058	HEADPHONE SOCKET	2SJ-05231N23	PCS	1	VR601
2100003	CONNECTION CORDS	Φ0.6 SAHPED 7.5mm	PCS	5	JP604,JP605,JP607,JP 609,JP610
2100010	CONNECTION CORDS	Φ0.6 SHAPED 5mm	PCS	6	JP601~JP603,JP606,JP 608,JP611

6. AV BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTITY	LOCATION
0090181	SMD RESISTOR	1/16W 100Ω ±5% 0603	PCS	1	R702
0090002	SMD RESISTOR	1/16W 2.2Ω ±5% 0603	PCS	1	R706
0310066	SMD CAPACITOR	50V 102 ±10% 0603	PCS	13	C701~C706,C716,C723 ~C728
0310058	SMD CAPACITOR	25V 104 +80%-20% 0603	PCS	1	C710
0310084	SMD CAPACITOR	50V 104 +80%-20% 0603	PCS	1	C710
0390095	SMD MAGNETIC BEADS	FCM1608K-221T05	PCS	8	L701~L704,L706,L708, L715,L716
0310085	SMD CAPACITOR	50V 20P ±5% NPO 0603	PCS	1	C713
0090019	SMD RESISTOR	1/16W 4.7K ±5% 0603	PCS	1	R704
0090029	SMD RESISTOR	1/16W 47K ±5% 0603	PCS	1	R715
0090017	SMD RESISTOR	1/16W 2.2K ±5% 0603	PCS	1	R710
0310234	SMD CAPACITOR	16V 105 +80%-20% 0603	PCS	2	C707,C711

0090001	SMD RESISTOR	1/16W 0Ω ±5% 0603	PCS	8	L711,L712,C717~C722
0700007	SMD DIODE	1N4148	PCS	2	D701,D702
0700001	SMD DIODE	LS4148	PCS	2	D701,D702
0700002	SMD DIODE	LL4148	PCS	2	D701,D702
0700004	SMD VOLTAGE REGULATOR DIODE	5.1V 1/2W	PCS	4	ZD701~ZD704
1563385	PCB	7969-5	PCS	1	
0000171	CARBON FILM RESISTOR	1/4W68Ω±5%	PCS	1	R703
0000181	CARBON FILM RESISTOR	1/4W220Ω±5%	PCS	1	R701
0000286	CARBON FILM RESISTOR	1/4W2.2K±5% SHAPED 10	PCS	1	R711
0000098	CARBON FILM RESISTOR	1/6W2.2K±5% SHAPED 5	PCS	2	R712,R714
0000436	CARBON FILM RESISTOR	1/4W2K±5% SHAPED 10	PCS	1	R709
0000133	CARBON FILM RESISTOR	1/6W4.7K±5% SHAPED 7.5	PCS	1	R705
0390057	MAGNETIC BEADS INDUCTOR	RH354708	PCS	6	L705,L707,L709,L710, L713,L714
1090045	ELECTRO-OPTIC TRANSFORMER	TX179ATW	PCS	1	JK705
1090024	ELECTRO-OPTIC TRANSFORMER	TX179AT	PCS	1	JK705
1910078	TERMINAL SOCKET	AV4-8.4-6G-3	PCS	1	JK702
1910129	TERMINAL SOCKET	SA-001-012 BLACK IRON SHEET SCREEN-SHIELDED	PCS	1	JK703
1910079	TERMINAL SOCKET	AV8-8.4-6G-3	PCS	1	JK701
1940140	CABLE SOCKET	14P 1.0mm STRAIGHT DUAL LINE PLUG	PCS	1	XS701
2100010	CONNECTION CORDS	Φ0.6 SHAED 5mm	PCS	11	JP701,JP704,JP710~JP 712,JP721~JP726
2100003	CONNECTION CORDS	Φ0.6 SHAPED 7.5mm	PCS	8	JP703,JP713~JP718,JP72 0
2100004	CONNECTION CORDS	Φ0.6 SHAPED 10mm	PCS	3	JP705,JP709,JP719
2100006	CONNECTION CORDS	Φ0.6 SHAPED 12.5mm	PCS	1	JP702
1860029	SCART SOCKET	SCART-01	PCS	1	JK706
0200031	PORCELAIN CAPACITOR	50V 20P ±10% NPO 5mm	PCS	1	C712
0780050	TRIODE	S8050D	PCS	3	V701~V703
1940026	SOCKET	3P 2.0mm	PCS	1	XS702
0000167	CARBON FILM RESISTOR	1/4W33Ω±5%	PCS	1	R708

7. DECODE BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTITY	LOCATION
0090001	SMD RESISTOR	1/16W 0Ω ±5% 0603	PCS	38	C2119,C2128,C2131,L2 10~L215,R201~R204,R 212,R226,R228,R234,R 236,R245,R247,R222,R 251,R255,R257,R258,R 282,R298,R299,R303,R 318,R331,R2159,R297, R271,R262,R268,R279, R346
0090006	SMD RESISTOR	1/16W 75Ω ±5% 0603	PCS	7	R233,R261,R270,R273, R274,R276,R280
0000375	CARBON FILM RESISTOR	1/4W2.2Ω±5%	PCS	1	R326
0090272	SMD RESISTOR	1/16W1Ω±5% 0603	PCS	6	R304~R307,R321,R340
0090003	SMD RESISTOR	1/16W 10Ω ±5% 0603	PCS	2	R301,R302
0090005	SMD RESISTOR	1/16W 33Ω ±5% 0603	PCS	16	R231,R232,R256,R263~ R267,R291~R296,R216 2 ,L202

0090232	SMD RESISTOR	1/16W 150Ω ±5% 0603	PCS	2	R2109,R2180
0090009	SMD RESISTOR	1/16W 330Ω ±5% 0603	PCS	4	R2105,R341,R342,R343
0090011	SMD RESISTOR	1/16W 470Ω ±5% 0603	PCS	2	R325,R327
0090013	SMD RESISTOR	1/16W 680Ω ±5% 0603	PCS	2	R259,R260
0090014	SMD RESISTOR	1/16W 1K ±5% 0603	PCS	20	L225,R213,R215,R2101 ~R2104,R2117,R2118~ R2128 ,R254
0090016	SMD RESISTOR	1/16W 1.5K ±5% 0603	PCS	3	R323,R324,R243
0090249	SMD RESISTOR	1/16W 510Ω ±5% 0603	PCS	1	R214
0090018	SMD RESISTOR	1/16W 3.3K ±5% 0603	PCS	1	R242
0090019	SMD RESISTOR	1/16W 4.7K ±5% 0603	PCS	16	R238~R240,R2130,R21 31,R2134,R2135,R2138 ~R2140,R2142,R2143,R 2146,R2147,R2150,R21 51
0090021	SMD RESISTOR	1/16W 6.8K ±5% 0603	PCS	6	R2136,R2148,R2152~R 2155
0090023	SMD RESISTOR	1/16W 10K ±5% 0603	PCS	14	R208,R229,R252,R309,R3 11,R313,R314,R329,R330, R339,R2164,R2106,R344, R345
0090024	SMD RESISTOR	1/16W 15K ±5% 0603	PCS	2	R209,R223
0090025	SMD RESISTOR	1/16W 20K ±5% 0603	PCS	4	R211,R312,R315,R316
0090255	SMD RESISTOR	1/16W24K±5% 0603	PCS	6	R2129,R2133,R2137,R2 141,R2145,R2149
0090188	SMD RESISTOR	1/16W 18K ±5% 0603	PCS	1	R210
0090029	SMD RESISTOR	1/16W 47K ±5% 0603	PCS	1	R289
0090197	SMD RESISTOR	1/16W 150K ±5% 0603	PCS	2	R319,R320
0090231	PRECISION SMD RESISTOR	1/16W 680K ±1% 0603	PCS	2	R317,R322
0090319	PRECISION SMD RESISTOR	1/16W 750K ±1% 0603	PCS	1	R227
0090034	SMD RESISTOR	1/16W 100K ±5% 0603	PCS	11	R224,R308,R310,R2111 ~R2116 ,R246,R347
0260126	CD	CD11 16V1U±20%5×11 2	PCS	2	TC242,TC243
0260019	CD	CD11 16V10U±20%5×11 2	PCS	20	TC201,TC202,TC217,T C221~TC233,TC236,T C240,TC241,TC244
0260028	CD	CD11 16V220U±20%6×12 2.5	PCS	8	TC207~TC209,TC211, TC213,TC235,TC245,T C301
0260025	CD	CD11 16V47U±20%5×11 2	PCS	13	TC204~TC206,TC210, TC234,TC237,TC302~ TC304,TC308,TC309 ,TC247,TC248
0310085	SMD CAPACITOR	50V 20P ±5% NPO 0603	PCS	1	C222
0310190	SMD CAPACITOR	50V 27P ±5% NPO 0603	PCS	7	C275,C276,C313,C314, C351,C340,C341
0310045	SMD CAPACITOR	50V 47P ±5% NPO 0603	PCS	17	C262~C265,C266,C289, C290,C292,C293,C295, C296,C298,C299,C2101 ,C2102,C2104,C2105
0310047	SMD CAPACITOR	50V 101 ±5% NPO 0603	PCS	8	C233,C2111,C2114,C21 17,C2120,C2123,C2126, C206
0310051	SMD CAPACITOR	50V 331 ±5% NPO 0603	PCS	2	C212,C213
0310048	SMD CAPACITOR	50V 151 ±5% NPO 0603	PCS	2	C304,C306

0310084	SMD CAPACITOR	50V 104 +80%-20% 0603	PCS	74	C207,C211,C214,C216,C217,C224,C226~C231,C234~C239,C241~C254,C256~C259,C267~C274,C279,C301~C303,C305,C309,C311,C312,C2138~C2143,C2153~C2157,C2161,C2163,C2169,C2166,C2174,C2175,C2168,C284,C287,C321,C348
0310058	SMD CAPACITOR	25V 104 +80%-20% 0603	PCS	74	C207,C211,C214,C216,C217,C224,C226~C231,C234~C239,C241~C254,C256~C259,C267~C274,C279,C301~C303,C305,C309,C311,C312,C2138~C2143,C2153~C2157,C2161,C2163,C2169,C2166,C2174,C2175,C2168,C284,C287,C321,C348
0310234	SMD CAPACITOR	16V 105 +80%-20% 0603	PCS	10	C201~C204,C221,C240,C285,C286,C349,C350
0310066	SMD CAPACITOR	50V 102 ±10% 0603	PCS	15	C2112,C2115,C2118,C2121,C2124,C2127,C223,C278,C315~C320,C288
0310231	SMD CAPACITOR	50V 122 ±10% 0603	PCS	6	C2122,C2129,C2130,C2133,C2135,C2136
0310067	SMD CAPACITOR	50V 152 ±10% 0603	PCS	1	C215
0310068	SMD CAPACITOR	50V 222 ±10% 0603	PCS	2	C307,C310
0310201	SMD CAPACITOR	50V 153 ±10% 0603	PCS	1	C210
0310055	SMD CAPACITOR	16V 333 ±10% 0603	PCS	1	C225
0310056	SMD CAPACITOR	16V 473 ±10% 0603	PCS	2	C219,C220
0310362	SMD CAPACITOR	16V474 +80%-20% 0603	PCS	1	C218
0390044	SMD INDUCTOR	10UH ±10% 2012	PCS	2	L303,L306
0390096	SMD INDUCTOR	1.8UH ±10% 1608	PCS	6	L243~L248
0390057	MAGNETIC BEADS INDUCTOR	CRH354708	PCS	12	L205,L209,L217,L220,L221,L222,L223,L227,L228,L226,L302,L351
0390095	SMD MAGNETIC BEADS	FCM1608K-221T05	PCS	39	L201,L203,L207~L208,L224,L234~L236,L238,L250,L309,L229~L233,L301,L304,L305,L307,L308,L310~L312,L314,L316~L324,L218,L219,L340,L341,L342
0090106	SMD RESISTOR	1/16W 4.7Ω ±5% 0603	PCS	1	L206
0700007	SMD DIODE	1N4148	PCS	18	VD201,VD205~VD221
0700001	SMD DIODE	LS4148	PCS	18	VD201,VD205~VD221
0700002	SMD DIODE	LL4148	PCS	18	VD201,VD205~VD221
0780029	TRIODE	C8050	PCS	2	V307,V308
0780030	TRIODE	8550C	PCS	2	V306,V309
0780062	SMD TRIODE	9014C	PCS	1	V310
0780033	TRIODE	9015C	PCS	1	Q204
0780020	TRIODE	C1815Y	PCS	1	Q212

0780197	SMD TRIODE	C1815	PCS	6	Q205~Q210
0780043	TRIODE	2SA1015	PCS	3	Q211,Q218,Q219
0780040	SMD TRIODE	3904	PCS	1	V305
0780193	SMD TRIODE	2SK3018	PCS	2	V303,V304
0780115	SMD TRIODE	2SB1132	PCS	2	V301,V302
0880185	IC	NJM4558M SOP	PCS	3	U219,U220,U221
0880562	IC	4580 SOP	PCS	3	U219,U220,U221
0880361	IC	4558 SOP	PCS	3	U219,U220,U221
0881059	IC	CS5333 SSOP	PCS	1	U210
0880322	IC	MM74HCU04M SOP	PCS	1	U205
0880513	IC	HCU04 SOP	PCS	1	U205
0881415	IC	HY57V641620HGT-7 TSOP	PCS	1	U211
0881872	IC	KSV464P4JA-70 TSOP	PCS	1	U211
0881182	IC	LM1117MP-ADJ SOT-223	PCS	1	U209
0881057	IC	CS4360 SSOP	PCS	1	U207
881031	IC	24C02N SOP	PCS	1	U202
881897	IC	MT1389EE QFP	PCS	1	U201
881994	IC	MT1389FE QFP	PCS	1	U201
881378	IC	BA5954FP HSOP	PCS	1	U302
881914	IC	RT9701CB SOT25	PCS	1	U222
960020	CRYSTAL OSCILLATOR	27.00MHz 49-S	PCS	1	X201
1940140	CABLE SOCKET	14P 1.0mm STRAIGHT DUAL LINE PLUG	PCS	1	XS204
1631744	PCB	2937K-6	PCS	1	
1940024	SOCKET	5P 2.0mm	PCS	1	XS302
1940023	SOCKET	7P 2.0mm	PCS	1	XS201
1940005	SOCKET	6P 2.0mm	PCS	1	XS303
1940171	SOCKET	13P 2.5mm	PCS	1	XS203
1940022	SOCKET	4P 2.0mm	PCS	1	XS304
1940094	CABLE SOCKET	24P 0.5mm SMD WITH CLASP	PCS	1	XS301